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"TO IMPROVE THE SOIL AND MIND."

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No. 2.

## SKETCHES OF MASSACHUSETTS FARMING.

FROM our last number we continue our notices of the cattle of Massachusetts.

We have before alluded, (*Cultivator*, vol. VII., page 134, and vol. II., new series, p. 75,) to a spirited and systematic attempt, commenced several years since, by Col. JAKES, of the Ten Hills Farm, near Boston, to establish a superior breed of cattle for the dairy. Though much, certainly, has been done by Col. J. towards the accomplishment of his object, his success would undoubtedly have been more complete, had all circumstances favored his operations. He has produced many valuable animals, and the excellent qualities of his "Cream-Pot" cows, seem to be acknowledged wherever they have been known. He still keeps a few animals of this stock. His bull Cassius, (five years old,) is not often excelled in external points, and we have no doubt that he possesses very valuable qualities. His color, like that of the Cream-Pots generally, is bright red, with a yellow skin. He unites the blood of some of the best animals Col. J. has ever bred, viz., that of the noted bull Don, (his sire,) and the celebrated cows Cypress and Coral (his dam and grandam.) Coral has been for some time owned by Mr. GEORGE ADAMS, of Somerville. From a statement of Mr. A.'s, published in the *Massachusetts Plowman*, Feb. 15th, 1845, it appears that he kept fifty cows; that he took a particular account of Coral's milk from Feb. 1st, 1844, to May 1st, same year, being three months; and that she averaged twenty-three quarts [beer measure] of strained milk per day: that he sold the milk which was given by this cow in ninety days, for \$103.50! Mr. A. considers her the most valuable cow he ever owned.

Col. J. has of late years sold most of the stock he has bred, at a very early age—generally while calves or yearlings; and the prices he has obtained, have averaged \$100 per head. Several have been sold within the last four or five years, at \$150, and some for \$200 each. But his farm has lately become too valuable for other purposes, (fortunately for him,) to justify its being much devoted to rearing stock. It is estimated to be worth \$1,000 per acre, for the clay it contains. It consists of 150 acres.

In 1845, the Trustees of the Massachusetts Society for Promoting Agriculture, imported four cows and a bull, of the Ayrshire breed, and a bull and the same number of cows of the Devon breed. They had previously, in 1835, we think, imported an Ayrshire cow and bull. On the farm of ELIAS PHINNEY, Esq., of Lexington, we saw the animals of the late importation, with their produce since their arrival. The old Ayrshire cow first imported, and several which the Trustees purchased at Capt. RANDALL's late sale, were likewise here, as was

also the Ayrshire cow "Medal," purchased by Mr. LAWSON, of Lowell, at Capt. R.'s sale. Several of the Ayrshires appear to be fine cows; especially "Medal," the old cow (now seventeen years old) above mentioned, "Jeannie Deans," and "Flora Macdonald,"—the two latter of the late importation.

The Devons appear to be well bred stock. Two of the cows were very much to our fancy, being well made, beautifully limbed, and mellow skinned, with very fair indications of dairy qualities. The Devon bull, we thought a very superior one, though he was in poor condition, from sickness. Mr. PHINNEY supposed his disease to be bronchitis, and he feared that it would prove fatal. We should regard the death of such an animal as a great public loss. Should he live, we hope his use will be permitted in some of the districts where oxen are considerably reared; and we will venture the opinion that his progeny, from the best formed and proper sized cows, will prove to be of high excellence for the yoke. We noticed several Devon bull calves, of fine form and thrifty appearance; in fact, we thought all the Devons, with one exception, indicated a great tendency to fatten.

The Ayrshire bull which the Trustees of the Agricultural Society first imported, has been kept in different parts of the state. He was for one or more seasons in Berkshire county, and has since been at different places along Connecticut river. His progeny are held in high estimation as dairy stock. We have met with several persons who have tried them, and they invariably speak very favorably in regard to their value. Mr. HENRY STRONG, of Northampton, has a cow of this stock, six years old, which is one of the best cows we have ever met with. She calved last season the first of April. Towards the latter part of the season, he was induced, supposing her milk was of very rich quality, to put her on trial for butter. He accordingly kept an accurate account of the butter made from her, from the 1st of September to the eleventh of November, and it averaged eleven pounds per week, by actual weight.

The late ISAAC C. BATES, of Northampton, (formerly U. S. Senator from Massachusetts,) purchased, several years since, the Hereford bull "Sir Isaac," which was sent from England by Admiral COFFIN, in 1824, as a present to the Mass. Soc. for Promoting Agriculture. This bull was kept till he was quite old by Mr. B., and from his son, Mr. S. H. BATES. (who now has charge of the farm,) and other persons in the neighborhood, we learned some facts in regard to the success of the Hereford cross. Mr. B. states, and Mr. STRONG concurred in the same statement, that for all purposes combined, they were the best stock ever kept in the

neighborhood. Their chief excellencies were for beef and work, and in these qualities they are said to have been much superior to any other cattle which have been known there. Their strength was great, and their quickness and speed as travellers remarkable. As to dairy qualities, Mr. B. states, that though the cows did not yield as large a quantity of milk as some, it was of so rich a quality, that in quantity of butter they were seldom exceeded. Mr. Cook, of Northampton, who has been in the practice of stall-feeding cattle for many years, frequently fattened the half-blood Herefords; and after several trials with them, was so convinced of their superiority, both in the rapidity with which they acquired fat, and in the quality of their beef, that he would pay several dollars more for lean animals of this blood, than for others of the same size. Mr. SARGEANT, of Springfield, and others, also spoke of the beef of this stock as being of better quality and flavor than any other they had ever seen. Mr. BATES has now two fine cows and a heifer, descendants of "Sir Isaac," which show strong marks of Hereford blood. But as Mr. B. has devoted his farm chiefly to sheep, he has discontinued the breeding of cattle, and keeps only cows enough to supply milk for domestic use.

From all we can learn, we are confident that the introduction of this Hereford bull was of great advantage to the section where he was kept; and we have no doubt that similar advantages would be derived there and in other good grazing districts of Massachusetts, by the use of prime bulls of the same breed.

Mr. HORATIO SARGEANT, of Springfield, has a herd of good stock. Among them we noticed a full-blood Durham bull, of fine points, and several full-blood cows which appear to be superior milkers. Also, some very handsome young steers and heifers.

Before closing this part of our subject, we wish to offer a friendly remark. Some of our brother farmers of Massachusetts should be more particular in regard to the blood of their stock. They are too inattentive to the real qualities of their animals, and in reference to their improvement, do not take hold of the matter as if they intended to understand it. In several instances bulls were shown to us as "Durhams" which evidently had not more than one-third or one-eighth of that blood, and were very miserable hard-fleshed animals besides. And we presume that the unfavorable opinions which we found prevailing in many places in regard to the Durham breed of cattle, is in a great degree attributable to the bad selections of bulls which have been made.

**FARMS, DAIRIES, &c.**—The farm of ELIAS PHINNEY, Esq., in Lexington, is noted for the good management it evinces, and for its general productiveness. He has a very fine and productive orchard, and has done much in reclaiming and rendering profitable, wet and marshy lands. But we were, unfortunately, so limited as to time, that we could but just glance at the arrangements, and must defer more particular remarks till we are favored with an opportunity (which we hope to enjoy.) of making a second visit.

Mr. JOHN HAMMOND, of Worcester, has a farm of 122 acres, which for neatness, productiveness, and good management, is not exceeded by any we have met with in any part of the country. About fifteen acres of the farm are in wood. He keeps about forty head of cattle, and besides affording pasturage for them, he cuts from 80 to 100 tons of hay per year. He usually has about twenty-five cows, and has sold seventeen hundred dollars worth of milk in a year, at five cents per quart. [We may as well remark here, that milk is sold in Massachusetts by *beer measure*, which is one-fifth more than wine measure.] Besides this, he has sold from his farm five hundred dollars worth of other produce in a year. His buildings and fences are in complete order. His barn is one of the best and most con-

venient we have seen. It is 90 feet long, 42 feet wide, and posts 18 feet high. The width is divided into three parts—a floor-way of twelve feet through the centre, and a bay and cattle stable of fifteen feet each, on the sides. It has a cellar under the whole, into which the manure and urine descends, and where loam and other materials are frequently spread on the heap.

We shall probably have occasion, hereafter, to speak more particularly of the advantages of barns constructed on plans similar to this; but cannot omit to mention here, an improvement which has been adopted by Mr. ABIEL JAKES, who has a beautiful farm, with good barn and other buildings, in Worcester. Where barns have cellars under them, considerable inconvenience is often experienced in getting the cattle from the cellar and yard into the stalls above. This inconvenience is in a great measure obviated by the contrivance alluded to. An inclined way is constructed at a low angle in the back part of the cellar, connecting at the upper end with the apartment in which the cattle are tied. A door at the connection of this way with the floor, prevents the cattle from ascending into the barn except when it is opened. The way is simply solid earth, supported and kept in place by stone-work at its sides and upper end.

In Barre and New Braintree there are some capital farms. The face of the country is rough and hilly, and the soil in many instances very rocky; yet it is made highly productive, especially for grass. The farmers are generally in very independent circumstances, and have no occasion to sigh for other climes. By well-directed and persevering industry, the "rough places" have been "made smooth," and the rugged features of the landscape have been even wrought into ornaments of beauty. The rocks and stones which originally occupied so much of the soil, have been removed, and formed into massive stone-walls, by which the farms are divided into beautiful fields.

In Barre, we called at three farms, lying contiguously, which, for the completeness of the buildings and other fixtures, and general "good looks," are hardly surpassed by any other three farms similarly situated within our knowledge. They belong respectively to Mr. DAVID KENDALL, DAVID LEE, Esq., and Mr. HARRISON BACON.

We first called on Mr. LEE, who kindly accompanied us to other farms in the vicinity, and afforded us other facilities, for which he has our thanks. His farm now consists of about 200 acres, though it was formerly much larger. He has made great improvements by clearing the land of stones, with which it naturally so abounded that it was almost impossible to plow it. A good portion of the farm has been divided into lots of ten to fifteen acres each. In many of them, the stones have been thoroughly taken out, so that the plow will run with as little interruption as on the western prairies; but to get the stones out of the way, the walls into which they have been put, are in several instances so wide that a carriage might be driven on the top of them! These lands now produce an average of two and a half tons of hay per acre; and fifty bushels of corn to the acre is quite common. Of oats, Mr. L. has obtained over eighty bushels per acre.

Mr. L.'s barn is said to be the largest in the state, with the exception of the "Boylston barn," in Princeton. It is 108 feet long, 44 feet wide, with posts 20 feet high. It has two floors, and the hay, &c., is carried in on the upper floor. It has a cellar under the whole. And we will here observe that all farmers with whom we conversed, who have had any experience with barn-cellars, state that the manure which is kept in them, is worth from fifty to a hundred per cent. more than that which is exposed in the ordinary way.

This section of country is quite noted for its cheese



dairies.\* Mr. LEE has formerly carried on the business of making cheese on a large scale. He has taken from the Massachusetts State Ag. Society, and the Worcester County Society, \$500 in premiums on that article.

Mr. BACON keeps about forty cows, and makes a large quantity of cheese annually. He milked thirty-six cows the last season, and they produced twenty thousand pounds of cheese, or an average of five hundred and fifty-five pounds to each cow. It sold at eight cents per pound, which gives as the income from each cow, \$44.40.

But Mr. BACON's cows are a superior lot, and have been selected with a good deal of care; though we have no doubt that the same attention which he has bestowed, may be given in most other cases with equally good results. Several of Mr. B.'s cows were procured from Mr. ELIAS AYRES, who lately removed from Barre to Virginia. Mr. A. took great pains with his stock, particularly in reference to their milking qualities. Statements in regard to the quantity of milk yielded by his cows have several times appeared in some of the papers of Massachusetts. At a trial which Mr. BACON made last season, it was ascertained that ten of his cows gave from twenty to twenty-five quarts of milk per day, beer measure. Some of these cows are from a fourth to half-blood Durham, and are really very fine animals.

It may be remarked as we pass, that many of the farmers of Massachusetts are aware of the great difference there is in cows, and are beginning to appreciate the value of a good one. For instance, in some of the dairy districts, ordinary cows are considered worth from \$20 to \$25, and good ones from \$50 to 75. Mr. BACON considers many of his cows worth each from \$65 to \$70. The prevalence of correct ideas on this subject will be likely to do great good by inducing the farmers to pay more attention to the blood and qualities of their stock, and will ultimately be the means of getting rid of the numerous horde that will not pay for their keeping.

New Braintree is likewise famous for its cheese. Capt. HOLLIS TIDD, of this town, has formerly kept a large number of cows, and manufactured cheese extensively; but of late years he has not carried on the business so largely. He took the \$100 premium of the State Ag. Society, for *old* cheese, in 1831, and if all his cheese is of a similar quality to some we tasted at his table, we should not be surprised at its taking premiums on any occasion, whoever might be his competitors.

Our stay in this neighborhood was necessarily too short to admit of our visiting many of the farms. We however called for a few minutes at Mr. JOSIAH GLEASON's. We were in so much haste that we had not time to gather many particulars; but we saw enough to convince us that it was one of the most perfect establishments it has ever been our good fortune to meet with. Everything about the premises—house, barn, and other buildings—bore the impress of ORDER AND NEATNESS, which, in our opinion, should constitute every farmer's motto. There was "a place for everything, and everything in its place." The long lines of stone walls were perfectly straight, and appeared to be as firmly built as though they had been designed to protect a city. Rows of beautiful trees of the sugar-maple, lined the wide and handsome road for the whole length of the farm. The home farm consists of 234

\* Since the above was written, we have received a copy of the Transactions of the Agricultural Society of Worcester County, for 1846. In the report of one of the committees, it is stated that according to the statistical returns of the state, the income derived from cows in Worcester county, "is one quarter of the whole amount of the income of cows in the state, and more than double the amount of any other county except Middlesex"—that "the capital employed in this branch of farming business in the county cannot be less than one million of dollars"—and that "there are but two branches of agricultural, and nine of mechanical industry in the Commonwealth, that yield a greater income than that derived from the cow."

acres, and there are 100 acres in out-lands. The stock consists of fifty head of cattle, chiefly cows, sixty sheep, and several horses.

There are many other fine farms in the neighborhood which we regretted not having an opportunity to examine; particularly those of Col. MIXTER, Mr. GREEN, and Mr. ELBRIDGE GLEASON.

#### IMPROVEMENT IN LUMBER WAGONS.

AN improvement has been made in England in the construction of lumber wagons, within a few years, and adopted already to a considerable extent, which we believe would be well worthy the attention of our mechanics. It is made with a view to admit of wide boxes, at the same time that the wagon itself may be turned at a short angle. This, every farmer knows, is often of great importance, in confined parts of farm-yards, narrow lanes, roads, and elsewhere, especially with heavy loads, when the usual expedient of running backward and forward a few times, to throw the vehicle about, is out of the question.

The usual point of turning, it is well known, is at the king-bolt, or large iron bolt through the centre of the forward axletree. If the box is wide, the inner fore wheel strikes the side, on even a slight inclination from the right-line. The improvement consists in placing the turning point further behind, at the point *a*, fig. 13,

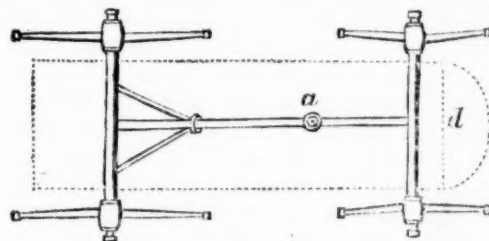


Fig. 13.

which represents a horizontal outline of the wagon, the dotted lines showing the position of the box. In turning, as shown in fig. 14, one wheel is thrown forward,

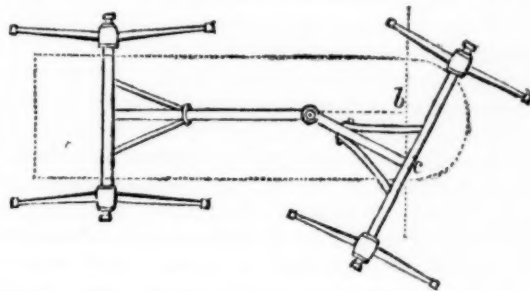


Fig. 14.

and passes round the end of the box, while the other is thrown further off, and consequently does not strike the box, unless bent round to nearly a right angle. The dotted lines show the position of the forward axle when straight, the distance from *b* to *c* being about the distance that the inner wheel is thrown off by the turning motion.

The forward end of the box is usually made semi-circular, but it may be made square, as shown by one of the dotted lines in fig. 19, at *d*.

These figures are merely intended to show the principle of this improvement, which we believe well worthy the attention of our agricultural mechanics. T.

**DRAINING.**—Imperfect underdraining is very common. A writer in the Hillsborough Gazette, gives the following good rule:—If water stands on the surface of a field three hours after rain has ceased to fall, that field is not sufficiently drained for the cultivation of grains.

## AGRICULTURE AND RURAL ECONOMY OF EUROPE.

### FARMING IN HOLLAND

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*Utrecht, Holland, Nov. 20, 1846.*

MESSRS. EDITORS—I find the season here so far advanced, that comparatively little is to be learned of practical agriculture, and I have, therefore, as yet, made no excursions into the surrounding country, that is, nothing more than short walks. My ride from Antwerp to Utrecht was rather interesting, as enabling me to see a wide extent of Dutch cultivation, and I will give you a sketch of those things which chiefly arrested my attention.

Antwerp is not at a very great distance from the Dutch frontier. The border land between Holland and Belgium, is a wide desolate looking tract of sandy moor, for the greater part entirely neglected. There was, however, in many places, a considerable thickness of organic matter above the sand, which would go far towards making an excellent soil. In some places I saw holes, where a substance resembling marl or clay had been raised to the surface, and laid in heaps. Were it either marl or clay, it would be highly useful on such light sandy soils. Great improvements are commencing here, and some flourishing looking farms begin to appear amidst the surrounding desolation.

The Crown Prince, I hear, has large possessions on these moors, and energetically promotes and encourages everything promising to advance cultivation there.

I was not able to ascertain, except by a hasty glance in passing, the system upon which these improvements proceed. Each one of the fields was enclosed by an open ditch, that indispensable accompaniment of a Dutch farm. In many cases, the turf, bushes, &c., &c., were burned, being collected in heaps; and the ashes afterwards spread over the whole surface.

After passing Grootunslert, the first town in Holland, we entered a fine agricultural district. The crops were all thriving, and the fields bore evidence of careful and laborious attention. This district, North Brabant, seems to be all drained as thoroughly as the nature of the case will admit. The summer level of the water is generally not more than 18 inches or 2 feet below the surface, and there is scarcely any fall; in the winter the whole country is frequently covered with water for months. The houses placed on slight elevations, and the roads on embankments, are alone visible. Such was the case in January of the present year, when I passed through this very district. These circumstances all united, render it necessary to make the drains large and open, thereby interfering of course to a considerable degree with economical cultivation. These ditches become grown up and choked with weeds every year; in all directions we saw men cleaning them with a species of rakes, drawing the vegetable masses brought up directly into boats, or forming heaps on the land. These cleanings of the ditches must form an important item in the Dutch farmer's list of available and effective manures. In some places I have seen men dipping up the black liquid from the bottoms of the canals, and laying it up in heaps on the banks. This mud, from its black appearance, must be rich in vegetable decomposing matter, and very well fitted to form compost heaps, or even to spread directly upon the land, after a winter's exposure to frost and warmth alternately. The large ditches on almost every farm, form a kind of canal, navigable by boats, carrying several tons; in these, manure is often carried from one part of the farm

to another, and the products of the various fields brought home. On some of the farms, horses would scarcely be necessary except for plowing. Farm vehicles seemed very few in number, and those few awkward in shape, especially the wagons, with high and narrow bodies, greatly elevated from the ground, and rising at both ends. From the forward axletree, a stick three or four feet long, turns upwards, and curls over towards the front board of the wagon box; this is generally terminated by a brass knob, which, in well regulated establishments, is kept scoured to a great degree of brightness. I had no opportunity of seeing any of the farming implements. I expect to find the Dutch far behind in this respect.

About half way between Antwerp and Utrecht, we passed through Breda, a large and very strongly fortified town. It is entirely surrounded by low, marshy ground, and in winter the water in the ditches is nearly on a level with the streets. After leaving this place, we came to a broad tract of rich, fertile land, partly a rather stiff clay, but afterwards becoming a fine light loam in appearance. Both of these kinds of soils appeared to be of great depth. The draining was as perfect as possible under the circumstances, and as I have described above; the water standing from eight to eighteen inches below the surface. The crops on the whole of this tract were remarkably luxuriant. Of course we could say nothing as to the grain crops, but the grass and the turneps particularly arrested our attention. The turneps seem universally to be sown broadcast, and are not thinned out; and the consequence is a great mass of leaves and stalks. How large the roots were we had no opportunity of judging. A large farmer, living in the neighborhood of Breda, rode with us some miles, and gave us much information as to his own farm and the practices of the country. I think the Dutch farmers and proprietors in general, can hardly equal this gentleman, who spoke French, German, and Italian, and read English with ease. The learning of foreign languages is, however, in so small a country as Holland, a matter of necessity to any one who ever goes a hundred miles from home.

We learned from this gentleman that in his section, at least, the Dutch are very deficient as to rotation of crops; in fact they have no rotation at all; they take as many successive crops of grain as they choose, or as they can. The land there is so good that this system may be carried on for a long time; but in many sections of the country I should think that they would be driven to a different course.

As I am only now about half way in my journey, I will stop for the present, and give you the conclusion at another time. Yours very truly, JOHN P. NORTON.

### NOTES OF A TRAVELLER IN ENGLAND—No. II.

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PLOWING.—The neatness and perfection with which the plowing is usually performed in England, is remarkable, and invariably attracts the attention of the traveller. The furrow-slice is much narrower than that usually seen in America; from nine to ten inches I found to be the usual breadth. Great care is taken that the furrow should not only be of the same breadth, but also equal care is taken that it should be of exactly uniform depth. The depth of the furrow is generally two-thirds of the breadth, and this enables the plowman to lay all his furrows in the proper position, and



with surprising uniformity. In plowing greensward, I found that the depth of the furrow was generally six inches by nine in breadth. The difference between good and bad plowing is very readily perceived after the grain is up. The furrow slices should be straight, of equal breadth and thickness, for unless this is carefully attended to, the ground will not be equally prepared for the reception of the seed; and that inequality, which is often observable in a field of grain, frequently arises from this inaccuracy. I seldom saw a crooked furrow, though I passed through more than twenty counties, and paid particular attention to the plowed fields in every part of the country. The head lands are finished with equal care and accuracy as the rest of the land.

In many parts of the country the land is plowed in ridges, which vary much in breadth. They are raised in the middle, and the open furrows at the sides serve as drains to let off the surplus waters. These ridges on retentive soils, are deemed indispensable, but on some of the lighter soils their utility seemed to me at least doubtful. In some parts of the country, they are used to enable the plowman to perform his work with accuracy; but it is believed that for this purpose it will not much longer be retained.

From a careful examination of the land after it was prepared for crops, I became satisfied that the narrow furrow slice is much to be preferred. The soil is completely and uniformly pulverized, and this, in connexion with draining, is one of the most effectual means of increasing the product of the soil. And when the perfection of the subsequent preparation, as mentioned in my former communication, is considered, it is apparent that the farmer may well ask from Him who makes the corn to grow, to add his blessing to the labor of his hands, having himself done all he could to secure the desired return. The large yield which is most generally obtained, shows that the system here pursued, is at least worthy of consideration, as the preparation of the land by the plowman has an important bearing upon the subsequent crop. Indeed, it has been well said,—“that the whole value of plowing, scientifically speaking, depends upon its having the effect of loosening the texture of the soil, and thus permitting a free circulation of air and moisture through the furrows, for the double purpose of increasing the rapidity of the disintegration of its stony portions, and of re-reducing to powder what had once been pulverized, but which, from the joint action of pressure, and the binding effect of root fibres, had been united together. However well land may be manured, and however thoroughly drained, you never can obtain the crops it is capable of yielding unless you pulverize it.

There are a great variety of plows in use here, yet I think several of the improved plows in America are equal to any I have seen. I have no doubt we have some plowmen, also, who may do their work with equal care and accuracy. It is not however, considered with us as indispensable to good farming, to have the land plowed with so much care. The most that can be accomplished in a given time, is generally considered more important *than the manner* in which it is performed. The plow is most generally here drawn by three or four horses in single file, with one or more drivers, though the practice of using two horses abreast, as with us, is evidently gaining favor, and will, I should think, ere long supersede almost entirely the other method. Reforms in this country are very slow, and it may take much longer time than I imagine to accomplish this. Oxen are but little used in plowing in those sections of the country through which I passed.

It is often said that we cannot expect to have our farms as neatly and carefully worked as they are here. The wages of the laborer are so much higher, and the prices of produce so much lower, that we cannot afford it.

This is doubtless true to a certain extent, but I do not perceive that it is a valid objection to the adoption of a more perfect system of plowing. The increased crop resulting from it, will, in almost every instance, amply repay for any additional labor and expense that may be required to prepare the ground.

**SHEEP AND MUTTON.**—The excellency of their mutton is the pride and boast of every Englishman, and from its almost universal use, it appears to be the national meat, rather than their famed roast beef. Until I tasted Welsh, South Down and Leicester mutton, in all their richness of flavor, as served up in London, I confess I knew not the value of mutton as an article of food. I soon became very partial to it, as I believe most Americans do who taste it here. The fatness of the sheep brought to market is truly surprising, and no one except those who occasionally see the rich mutton fattened in Albany and its vicinity, and some other localities, can have any conception of it. In passing through the country early in May, I saw multitudes of sheep feeding from early green crops, inclosed usually in hurdles on the fields, so as to secure the manure, and these removed as required, until the whole field is consumed, or the sheep ready for market. Turneps also are used to a considerable extent, as well as oil-cake, in the fattening of sheep.

The sheep are never taken to market, so far as my observation extends, except when in the very best condition. Indeed I never saw in the markets in England, what would be considered a lean carcass of mutton.

The breeds of sheep above mentioned, are those most esteemed for mutton. The small Welsh mutton is the finest flavor of any I ever tasted, and it commands, I believe, uniformly, the highest price in market. The quantity of this variety is small compared with the others. The Downs and Leicesters, and a cross between them, are the next, though the Cotswold and some others command nearly as high prices. The quantity of mutton consumed in London alone is enormous. From 30 to 45,000 sheep are weekly sold in Smithfield market, and a very large number of slaughtered carcasses are brought up to the dead meat markets from all parts of the kingdom.

How far it may be desirable to encourage these breeds of sheep for mutton with us, it is not for me to say. The prices with us bear little comparison with those usually obtained in England. The common price in London last spring and summer, was, from three and six pence to four and six pence, sterling, the stone of eight pounds, averaging about twelve cents the pound. My own impression is, that in the vicinity of our large towns, these sheep might be reared and fattened at a profit, and I presume those who have engaged in it, have generally made it profitable. At all events, if we are to have mutton, let us endeavor to have the best breeds, well fattened, and then we shall know how to prize this delicious, and I believe, most healthy meat.

#### RESULTS OF CHEMICAL INVESTIGATIONS.

Giessen, Nov. 10, 1846.

**MESSERS. TUCKER AND HOWARD**—In my letter of July last, I gave Dr. KROCKER's determinations of ammonia, in a variety of soils. They were in beautiful confirmation of Liebig's views, but far outstripping his expressed anticipations, so far as *quantity* was concerned. A recent experiment has shown that if aqueous ammonia be poured upon a funnell filled with fine clay, the filtrate is simple water! all the ammonia remains with the alumina. Here is a comprehensible explanation of one of the known advantages of an aluminous soil. Another has been brought to light in the course

of last summer, going still farther to explain the value of this kind of soil for the growth of grains. It is the presence of *phosphate of alumina* in vastly greater profusion than was formerly supposed, or revealed by analysis. It is as yet unpublished. *Soluble silica*, which gives to the straw its strength, more or less in quantity, is also a characteristic of this soil.

The clays owe their origin to the decomposition of feldspathic rocks. How this decomposition was effected, was, until within a short time, altogether in the dark. Light has been shed upon it by the labors of analysis, in porcelain manufactories, and ere long no doubt will rest upon the whole natural process.

The feldspars are silicate of alumina and alkalis. A certain percentage of the silicate of potash or soda is first dissolved in water or carbonated water, and flows out, leaving behind a mineral richer in alumina, and also in silica, in proportion to the potash, than before. Mere carbonated water removes more potash and silica, leaving even a purer and purer alumina behind. This is the clay. The degree of purity, and its quality for pottery and other purposes, depend upon the meteorological character of its situation.

We are still at the commencement of the solution of many great questions deeply interesting to the farmer; our supplies of potash, bye-and-bye, are to come from *where?*—and of soluble silica, from *where?*—and of phosphates, from *where?* These questions, chemistry, with the aid of a generous agricultural people, will answer in time—and she will answer simply and satisfactorily too, the perhaps equally difficult ones presenting themselves on every side—of our people engaged in mining and manufactures. I trust American chemists will be given to share in the labor.

In my departure from Europe, I leave one American in Berlin, one in Freiberg, one in Utrecht, and three in Giessen, all devoted to chemistry. The Berlin and Freiberg students will come to Giessen after a time, to close their course with the great master. When all these shall have completed their studies and returned to the new world, to co-operate with those already in the field, I see no reason why we should doubt America's future instrumentality in the advancement of this department of science.

There has never been a year of the Giessen school so fruitful in the development of new and weighty truths in chemistry as that now drawing to a close; and the next edition of Liebig's Animal Chemistry, will, if I do not greatly mistake, startle the scientific world more profoundly even than the first.

There are now between sixty and seventy students with Liebig and his assistant, Prof. Will, and among them not a few whose names are destined to figure in the annals of science.

In parting from my alma mater, and reflecting upon the mighty influence exerted by this school, I can not help feeling deeply the force of that remark of Bacon's, which, with a little introduction characteristic of its source, Liebig so often repeats to his pupils—"Work! work!! work!!!—and see that your labors have always something useful in prospect."

Very respectfully, yours, E. N. HORSFORD.

#### RURAL NOTICES ABROAD—No. II.—By CAIUS.

ROME AND ITS ENVIRONS.—The Campagna is a great rolling plain, sweeping around the city of Rome. The Tiber, a swift and turbid river, rolls through it, and washes the feet of those seven hills upon which the city was built. The hills are not high, and are now scarce discernible, amid the groups of houses and churches. Villas have been built around the city, and tracts of the Campagna have been walled in, and planted and cultivated. Some of these are ornamented with long ave-

nues of trees—pines, and lindens, and beeches, and the walks are bordered with the richest hedges of box, that are, perhaps, to be seen in the world. Others are laid out in the English style, with sheets of water, and clumps of foliage, and irregular groups of trees. The gardens within these villa grounds, are in the highest state of cultivation, and supply not only the wants of their princely owners, but much of the produce finds its way into the ordinary markets of Rome. Vegetables of nearly every kind, grow luxuriantly in these gardens; the fruits, saving a few of a tropical character, such as figs and lemons, are neither so good nor so various as ours. Around the villas, and even within the old walls of the city, are fields devoted to public gardening, highly enriched, and yielding most abundantly. Straggling hedges are to be seen in the neighborhood of the city, but in general, the enclosures are of brick or stone. Vineyards are upon the sunny slopes of the elevations about Rome, but no wine of extraordinary flavor is made in its vicinity, nor are the grapes in any way remarkable. They are cultivated as in France, upon stakes, of from three to four feet in height, and are set at about the same number of feet from each other. The stiff formal tops of the olive orchards appear here and there, but are mostly to be seen upon the slopes of the mountains beyond the Campagna.

The spade is the almost universal implement of culture in the neighborhood of Rome, and I remember seeing a company of forty laborers engaged in spading a ten acre field of tough green sward, just outside the walls. The work was necessarily slow, but most effectively performed. The implement itself is clumsy, as are all of Roman handicraft. The heavy duties prevent the importation of foreign improvements, and the Roman cultivators are nearly a half century behind the age. Even the chairs at Rome are all made by hand, and there is a street in the city, where, on a sunny day, may be seen the workers upon chairs, seated on the pavements, shaving out the rounds, one by one. The common wheelrights are as unprovided; and a little wood and iron, with an axe and auger, make up their stock in trade. Laborers may be found for all ordinary work, at from fifteen to twenty cents a day, and they will hire, even in the city, for ten cents a day. The commoner sorts of wine, from the mountains, may be bought for two cents the pint, and a laborer wishes only beside, a *bouillon*, (soup,) and a plate of maccaroni, with perhaps a sour orange. In the morning, he gets his *caffè latte*, (coffee with milk,) and a roll of brown bread, for two cents: sometimes he will take a fried supper in the open air at one of the stalls which are scattered over the city, but oftener he goes to his straw without it.

The markets are well supplied with mutton, from the plains and mountains, and with beef that fed upon Campagna, in winter, and upon the slopes of the Albanian hills in summer. No where is more economy observed in meat-cutting, and it would puzzle a naturalist to detect a portion which does not come sooner or later to the fry-pan. Lambs' brains are among the delicacies of a Roman epicure. There is little offal to a Roman butchery. Large herds of swine feed over the morasses, in the forests stretching down by the coasts, twenty or thirty miles from Rome; and among them troop along the heavy moulded, scraggy-looking buffaloes. These have rough, curling, coarse hair, their horns droop like those of some of the Scotch breeds; their color varies from brown to black; they have a wild, red eye, yet not unfrequently are seen broken in to the yoke, and lying beside their clumsy carts in the Roman forum. The oxen, however, which are relied upon for the market, are a large, deep-chested, well-formed, light grey beast, with enormous horns, (spreading from three to four feet,) and are said to have sprung from that famous breed of white cattle, which history and



romance alike assign to the beautiful valley of Clitumnus. Hence Macaulay, in his lay—

"No more along Clitumnus  
Grazes the milk-white steer."

They have not the square butcher make of the Herefords, or Durhams, but taking into view their soft, fine-haired skins, their large, black, intelligent eyes, and their branching horns, I have never seen handsomer cattle in any part of Europe. The beef is by no means highly fed, and as a consequence, is not of very superior quality. The pork at Rome is decidedly inferior, while that in Naples is unsurpassed for delicacy and flavor, by any in the world. Wild boar's meat, makes its appearance frequently in the market, and when cooked with the rich sauces of the country, is highly esteemed.

The native horses are wild and shaggy, but strong, and possess great powers of endurance. In winter one may see the herdsmen scouring over the plains, in rough sheep-skin coats, and mounted upon the wild, shaggy horses. In that season, the sheep upon the Campagna are numbered by hundreds of thousands, and groups of the grey oxen are feeding here and there

over the waving surface. Five hundred thousand acres of such waving land stretch around the walls of Rome, and make up the old Agro Romano. This is divided by ditches or imaginary lines into vast farms, of from 1000 to 10,000 acres, and until within a very short time there was a single one of 20,000, which rented for the sum of \$30,000 a year. These are owned by residents—in many instances, Princes of Rome. In but very few instances do the owners pay any particular attention to the management of their lands. The larger farms are leased for a term varying from 10 to 50 years, to *fattore* or *mercante*, who furnish the capital necessary to work them. By far the larger portion of the lands, however, are rented upon the *mezzeria* system—almost precisely like the system of farming "upon shares," common to the landholders of New England. The owner furnishes capital, the lessee furnishes implements and labor, and the profits are divided. Yet, strange to say, many a poor farmer (*fattore*) taking upon such terms, a thousand acres of the Campagna, rich as prairie land, and within a half day's walk of the city of Rome, can scarce make a livelihood! Let us see what difficulties lie in his way.

## WESTERN FARMING.

We have seen in several papers, some articles purporting to be from "DR. ELLIOTT'S LETTERS," in relation to Western Farming. We know not where or when these letters first appeared, neither have we any other knowledge of the writer than what we gather from the published articles alluded to; but we think our readers will be interested in the following synopsis of some of the items which we condense from an exchange paper.

**WINTER PASTURE ON THE PRAIRIES.**—We think that some people, who have flattered themselves with the idea of making fortunes by wool-growing in the west, expected to derive great advantage from grazing their sheep on the prairies in the winter season; but we have seen enough of prairie grass to satisfy us that after it is killed by frost it can afford but trifling support to any animal. This agrees with what Dr. ELLIOT says: "The prairie pasture answers the purpose until the frosts set in, and after this it is useless, as it dries up and has no substance in it for nourishment more than the worst straw."

**SHEEP IN ILLINOIS.**—MESSRS. BROWN & SMITH, at Island Grove, "half way between Springfield and Jacksonville," (Ill.,) are said to conduct their farming business on an extensive scale, each having about 1,400 acres under fence, and cultivated in grain and grasses. Each keeps a flock of about 1,400 sheep, and each cultivates from 400 to 600 acres of corn annually.

"Their sheep are pastured part of the year on the open prairies, where they are attended by shepherds. They are fed in the winter on hay, corn fodder, and corn, for the most part. Corn is found to be as good food for sheep on the prairie farms as any other. And corn fodder is believed by these enterprising farmers to be better than hay. The earlier their lambs come in the year, they consider the better; as those lambed in January and February they find to be much better than those of March or April. The early lambs can be weaned much earlier than the late ones, and are therefore stronger to endure the ensuing winter. In short, they consider the early lambs more than 25 per cent. better than the late ones; as they make larger sheep, and good, strong breeders for the next year."

This practice of having lambs dropped in January and

February, it should be remembered, is "adapted to the meridian of southern Illinois" rather than New-York and New-England.

**BIG FARMS.**—An extensive farmer of Morgan Co., (Ill.,) by the name of STRON, is said to have "seven thousand and two hundred acres enclosed and under cultivation, in grain and the grasses. He thinks the blue grass does not suit the prairies, on account of their richness and other reasons." Timothy with clover is preferred for hay; but clover is chosen for pasture.

"Some of his fields," it is said, "exceed a thousand acres. He purchases young cattle in great numbers, and has continually on hand fat cattle for the market. He also owns several farms of from three hundred to one thousand acres, in different parts of the country, where he grazes and feeds his cattle. Perhaps he occupied more land as a grazier, than any man in Europe or America."

The following very sensible conclusions, particularly the closing sentence, we would recommend to the attention and consideration of all farmers:

"After all, those huge farms may not be so profitable, according to the investment. Mr. Stron told us that three hundred and twenty acres was enough for any man, and Mr. Smith informed us that six hundred and forty was as much as any one ought to cultivate. Yet there are thousands of farmers with far less ground who live happier and enjoy life better than those that cultivate the large farms."

**RAISING ROOTS.**—William Garbutt, of Wheatland, whose great and uniform success amply shows his skill, says, in the *Genesee Farmer*, "The principal art of raising roots is to make the ground rich and well pulverized; and fall is much the best time to do it. Apply 40 or 50 wagon loads of well-rotted manure; 5 bushels of plaster; and 5 to 10 bushels of ashes per acre; spread them evenly over the surface, and plow 7 or 8 inches deep, and narrow furrow it not over 10 inches wide. In the spring, harrow or cultivate thoroughly, until the ground is well pulverized and the manure well mixed through it. Be sure to plant early, before the ground gets too dry to germinate the seed."

## REMARKS ON THE POTATO ROT.

MESSRS. EDITORS—Although the subject of the potato rot has been dwelt upon through the press, and in almost every other way, until it seems to be pretty well made "threadbare,"—though many have given it up that it is, and therefore must continue to be,—it still appears to us to be a subject on which something can be said and done, and that, peradventure, some course may yet be found out and adopted, whereby its ravages may be checked, if they cannot be wholly stopped.

When a new disease breaks out in a country and community, the first object of the skilful physician is, to note it in all its qualities and peculiar bearings upon the patient. He invariably finds some more liable to attacks from all such diseases than others, and if the disease becomes prevalent, he finds that different management is necessary among his various patients, in order to obtain power over their disorders, according to the nature and character of the attack, or the constitutional predisposition of the invalid to baffle or encourage the workings of the malady.

Now we premise that this is just the way in which the farmer should manage all ailments which may arise, not only in his herds and flocks, but in the productions of his tillage. They are all subject to disease, and often, as has been the case with the potato, to new diseases.

In the remarks we have to offer on the potato disease of the last year, we shall aim at accuracy. Yet we do not suppose that the result of our observation will correspond with that of everybody else, for, as we have said before, disorders of the same name operate under different forms, as circumstances vary. That it will prove so in this, will not be marvellous.

We remark, then, firstly, on the general character of the season. Our winter, a staid and healthy old fellow, even for New England, where winters always wait to hear the first song of the spring birds, and gather the earliest flowers that come to usher in the floral year, though it gave us more than one hundred days of sleighing, was in unusual haste to hie him away to where the cold ice seas of the north would greet him with more congenial salutations, than those that whistled their melodies along our hill sides, so that the labors of the field were commenced at a much earlier date than usual. Planting, which is usually done from the 10th to the 25th of May, was much of it finished in April, a month which, though it brought some fine showers, was not remarkable for a very liberal abundance of rain; May, too, was much dryer than Mays are apt to be, and somewhat too cool to aid the early springing of the crops into anything like precocious luxuriance, and June, sweet month of beauty and melody, closed up the clouds with the hand of parsimony, so that the farmer, as he looked upon his meadows, saw with saddened countenance, that fears might well occupy his mind that a season of dearth awaited his flocks and herds. Perhaps the rains of these two months would have been sufficient for the cravings of vegetation, had they fallen gently and been of longer continuance, rather than falling in powerful showers, and flowing off the earth rather than penetrating it. Indeed, they were in most cases followed with high, cold winds, calculated to disperse the surface moisture, insomuch that it was a common observation, "how soon the ground gets dry after the rains." Let us note here the general effect of such rains and the after winds, is, to form a crust on the surface of many lands, especially such as are inclined to clay, whereby they in a great measure lose their permeability to air and moisture, and which also

prevents the evaporation of gases which may be injurious to vegetation if it contains them.

In July the atmosphere was more humid, and the rains more gentle, so that their influence on vegetation, especially grass, operated entirely to change the face of it, and the farmer who did not hurry his labor in the meadow, found an increased burthen as the reward of his patience.

Potatoes did not appear to suffer for moisture in any part of the season, other than that the quantity in the hill was diminished from former years, as might well be supposed would be the case under the circumstances.

The first intimation we had of the appearance of the rot, was on one of the last days of July. The crop affected was growing on a tract of land from which the earth had been removed in building the *Western railroad*, to fill, or raise an embankment through the swamp, whose qualities as a *sinking fund* concern, were so celebrated during the operation, consequently nothing but the subsoil or hardpan remained. This had been improved by good tillage, and manuring with unfermented manures, for, perhaps, three years. The location rather low, and in proximity to swampy lands, subject to heavy fogs. It was the only instance we heard of until about the 10th of August, when a return of lowering weather, attended by southerly winds, came on. The complaint of the striking of the disease was heard from every quarter. Many farmers immediately adopted the experiment of mowing the tops, a labor which in most cases proved unavailing. In its progress, it was, however, clearly to be seen that lands inclining to coldness and humidity, and such as had the appearance of *sour soils*, were the first to be affected.

The weather cleared off in a day or two, and the northwest breezes seemed to check, if not stop its progress. About the middle of the month, another cloudy turn, accompanied with some rain, and south wind, came on, and it again commenced its ravages. One farmer informed us that he examined his field and dug potatoes in it on Saturday, and no symptom of the disease was to be found. The wind came south that night, and was followed with rain, and on Monday or Tuesday he examined it again, and he did not believe there was a potato but what was affected. The result at harvest time I have not heard. From the middle of August the weather became more serene, and we heard no more of the rot.

As regards our own crop;—we plowed the latter part of April. The soil a slaty loam. Land had been in pasture for twelve or fourteen years, and had no manure of any kind except what was left on it by the stock feeding. Plowed eight inches deep, thoroughly harrowed, furrowed, and potatoes planted in the furrows. No vegetable or animal manure was used, except two small loads, spread on one corner, and harrowed in. After the potatoes were dropped, (planted about the 20th of May,) a table spoonful of plaster was thrown in each hill. They were hoed twice, and the hills but slightly raised. When the disease gave evidence of its existence in our neighborhood, we went to them scythe in hand, and found that in some parts of the field it gave evidence of its existence there. In mowing the tops we designed to give the experiment a fair trial. Accordingly, in doing it, we left rows, parts of rows, and squares of four to sixteen hills each, in various parts of the field, uncut, and waited the result.

We remark here, that at this time, the ground gave



no evidence of moisture, down to the bottom of the hill. The atmosphere was cloudy, with occasional mists, and oppressively warm; wind southerly. The ground was also very warm; unnaturally so, for, on thrusting the hand into the earth forming the hill, was like putting it in hot ashes—a dry, scorching heat.

The vines which were not mown, dried up in a week or two, and the potatoes were dug from the twentieth to the twenty-fifth of September. The result was, that in the part mown, where no evidence of the disease existed, there were no rotten ones. Where it gave slight appearances of its existence at mowing, very few, probably not one bushel in twenty, were diseased. Where they were not mown at all, from one-fourth to one-third were rotten. Such were the results of our experience. That others may bring contradictory statements is very probable; but those will not alter the facts that we have seen, and yet, from different circumstances, their statements may be true.

Many have objected to mowing the tops, because it will stop the growth of the tuber. It does undoubtedly retard it, not wholly stop its growth. So does the rot, if it remains of long continuance. One farmer told us, that he mowed a part of his, but those in the hills not mown, grew so much larger, that they more than balanced the loss of those that decayed.

Then again, in the matter of their starting a new crop where they are mown; they may or may not; ours remained in the ground more than a month, and gave no intimation of sending up new vines. Yet in other cases they may do so. We are fully convinced that if mowing will save them, it must be done before the disease strikes them, or very quick after. How beneficial it may be in such cases we can not say. We know what it *has* done for ours.

Various experiments were tried by different persons, and in different locations, to get around the evil, a few of which we subjoin. One farmer tried ashes and plaster, mixed in equal quantities, in the hill, and then, in adjoining rows, ashes alone,—and in another part of the field, plaster alone, and in some he manured with unfermented farm-yard manure. When the disease came on, he mowed half the piece, mowing two rows and leaving two. The result was, as he says, that his crop was an entire failure, not getting more than fifteen bushels where he ought to have had one hundred. He saw no difference in effect in the several causes proposed.

Another says, he went on to a remote part of his farm, and plowed and planted an old piece of pasture land, that had never submitted to the plow or received any manure, except such as came by accident, and he had no rot in his crop.

In canvassing the general information that has come to our reach, we must conclude that crops planted on light porous soils, or stimulated by hot, exciting manures, fared altogether the best.

That the disease is produced by some atmospheric quality, aided by a predisposing influence in the soil, to us appears more than ever conclusive. (We carefully examined the stems for the worm, but he was not there, and gave no evidence of having been there, and as for the insect preying on the leaf, so far as we examined, the leaves were more perfect than in the previous year, 1845, when there was but little or no rot.) The same may be said with regard to the rust on wheat. Every farmer knows, or may, if he will notice the fact, that wheat, and indeed, other grains, are often struck with blight, while fields near by do not experience any of its influence. We once saw this fact illustrated in two fields not more than four rods apart, where in one the straw was perfectly bright at harvest time, while in the other, the rust was so manifest that its effects could be seen a great distance. Yet the latter field

was tilled with as much care as the former, but the soil and exposure were different even in that short distance. But the wheat crop is not abandoned because exposed to rust. Farmers have learned to manage the crop so as in a great measure to avoid its influence; and we have but little doubt, but by perseverance and close observation, (such as the physician must pursue in order to baffle new diseases,) the potato plague will eventually be in a great measure overcome. At least we fondly hope, and are willing to pursue our labors in the hope, that such may be the case.

But the potato has not been the only sufferer by the plague the last season. Here, as in other places, its influence has been seen on the tomato, carrot, and, indeed, that or something like, on some varieties of fruit. Plums gave abundant evidence of its existence, and perished of a dry rot on the trees in great numbers. Apples, in some locations, had the plague spot indelibly marked on them, and their disposition to rot in the fall, and so far this winter, is remarked by almost every one. And so with other fruits.

WILLIAM BACON.

Richmond, Mass., Jan., 1847.

EDITORS CULTIVATOR—For the last two seasons I have escaped the potato rot, which has been quite general around me. I am not quite sure that the course of treatment which I have pursued, would, on different soils and in different seasons, produce the same result; but as no evil can result from the practice which I have adopted, and as I cannot attribute my escape from the rot to any other cause, I give you the facts to dispose of, as you may think best.

In the fall of 1844, my potatoes were for the first time considerably injured by the rot; in consequence of which, I read with care every article on the subject which came in my way. One writer stated that he planted his potatoes quite early in the season, and that his crop in the fall was sound and good, while those of his neighbors, which were planted later in the season, suffered very much from the rot. On reading this article, I resolved to pursue a similar course the next season. Accordingly, in the spring of 1845, I planted my potatoes the first of May, which was about two weeks earlier than my usual time of planting. They were hoed only once, and were ripe and dug in September, when the ground was dry, all sound and good, and they continued so.

In the spring of 1846, the ground being dry, it was made ready, and the potatoes planted the 10th and 11th days of April. They were hoed only once, and were ripe in August, but not dug until September. When dug the ground was dry—the potatoes came out clean, and as sound as any I ever raised, and at this time there is no appearance of disease among them.

The soil on which the potatoes grew, both in 1845 and 1846, was muck. The potatoes were of three kinds, viz: White, Flesh-color, and Neshannock.

The seasons, both 1845 and 1846, were unusually dry. Most of my neighbors have suffered severely from the rot for the last three years.

About the middle of May, last past, I planted a small patch of potatoes for the purpose of experiment, in contrast with those planted early in the season. The soil in which these were planted was gravelly clay. They were left in the ground until the 10th of Nov., then dug and found to be diseased, but not rotten. Purple spots were to be seen on nearly half of them. They were laid in a cellar, and in about two weeks were found to be rotting badly.

I give these facts hoping that it may induce others the next season to try experiments by planting both early and late, on the same and on different kinds of soil.

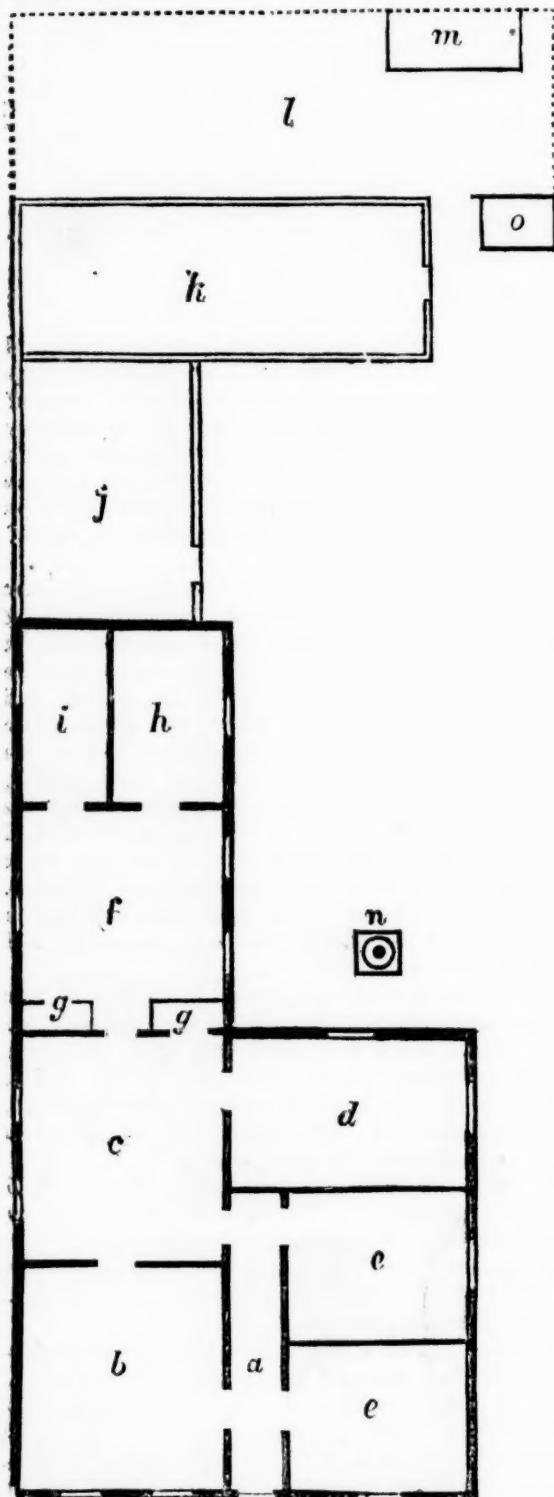
Yours respectfully,

J. HORSFORD.

Moscow, N. Y., 1846.

## PLAN OF A FARM HOUSE.

EDS. CULTIVATOR—A request of mine in a former number, that some one would furnish a plan for a cottage, having all the rooms on one floor, has been gratified in your Dec. number, by your correspondent "ZEA," of Montreal.



His plan strikes me very favorably, as combining nearly all the conveniences that any family can reasonably desire. Its dimensions are rather large for ordinary families, but of course can be reduced, and the apartments somewhat varied to suit the circumstances and particular wants of any family. Let the exterior

be finished in the gothic style, or only with a neat balustrade, and it may in truth be termed an elegant residence.

Cottages of this general construction I consider eminently fitted to the business of farmers' families, and I would like to see them greatly multiplied through the country. For the purpose of adding to the variety of plans, which are sent for insertion in the Cultivator, I send you one which may suit the taste of some, premising that if built of wood, it should stand two feet above ground, and have a cellar underneath. The house is supposed to face the south.

*Explanation.*—a, hall; b, parlor; c, dining and family room; d, family bed room; e, e, bed rooms; f, kitchen; g, g, closets; h, bed room; i, pantry; j, wood-house; k, carriage-house and horse barn; l, barn-yard; m, barn; n, well; o, hog pen.

In the above plan I have purposely omitted giving the dimensions of the house, and the several rooms, for the reason that any one can build according to his means, and the size of his family. A cottage and its appurtenances in this vicinity, constructed much after the above plan, having an attic surrounded by a balustrade, has excited much attention, and elicited the remarks of hundreds as to its elegance, cheapness and convenience.

H. A. P

Buffalo, Jan., 1847,

## A REMEDY FOR THE BLACK WEEVIL

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EDS. CULTIVATOR—I see by the last number of the Cultivator, that Mr. Clark Rich, of Shoreham, Vt., has been trying many experiments without success, to remove or destroy the black weevil, which is so destructive to grain, and so troublesome in mills, granaries, and barns.

They are likewise very destructive to rice. I will furnish the public through the medium of your estimable publication, a remedy which has thus far stood the test of experience; hoping that you may deem it worthy of insertion. I have never failed after repeated experiments, for many years; and have been frequently amused, particularly in witnessing its effects in a cask of rice, when it was almost destroyed by weevil.

It is wonderful to see with what expedition they will leave it when the remedy is applied.

The great advantage of this remedy over others, is, that it does not in the least degree injure the grain, and also, it is so simple and easy, that almost every person has it in his possession.

It is simply sassafras (*Lanous*) root, placed among the grain, and in places infested with them. I have never had the opportunity of putting it in a stack of grain at time of stacking, but have no doubt if it be well mixed with the grain, it would keep out many other kinds of insects that are so injurious.

It is a well known fact that no kind of insect likes the smell of sassafras.

The same root is useful about poultry houses, and I find that poultry in the habit of roosting on poles made of the tree, are not liable to get lousy.

Yours respectfully, JOHN H. KING.

Georgetown, D. C., Dec. 23, 1846.

RAILROADS BENEFIT FARMERS.—Fifty four tons of poultry were sent over the Boston and Providence railroad on a single day.



## FENCES—DIFFERENT KINDS.

WHAT shall we do for fencing materials? is an inquiry which is frequently made, and in many parts of the country, the expense of obtaining such materials, and of forming and supporting fences, constitutes a heavy bill in the outgoes of the farmer.

It has been suggested that iron might be used in some sections, with as much if not more economy than any other material. A correspondent with the signature of "TILLER," from New Jersey, writes—

"I have been thinking over in my own mind, whether an iron wire fence would not be cheaper and far more durable than any of the ordinary fences now in use; and after much calculation as to the relative cost of the various descriptions of rails, have arrived at the conclusion, that one made of wire, (No. 7 or No. 8,) would have the advantage. According to my estimate—allowing the wire to cost 8 cents per pound—a panel of 10 feet, with five rails, will cost about 30 cents—whereas, the rough rail of cedar, or chestnut, with but four rails to the panel, will cost from 32 to 36 cents—in both cases exclusive of posts. The posts for a wire fence are the least expensive, inasmuch as the labour of making holes with a post-axe is supplanted by the more expeditious method of boring with a three-eighths or half-inch auger."

We are unable to present a comparative view of the expense of fences of iron-wire compared with those of wood, of various descriptions. If any of our correspondents have had any experience on this subject, we should be glad to hear from them. If any one has constructed fences of this kind, we should feel obliged if he will state the cost—the kind of posts used, how far apart placed, the size of the wire used, the mode of stretching it, and how secured—the height of the fence, the number of wires to each length or pannel, and the kind of stock against which the fence is intended as a barrier.

We learn by the agricultural publications of England and Scotland, that wire fences are becoming considerably used in those countries. We have lately received a pamphlet from Messrs. W. & C. YOUNG, manufacturers of iron and wire work, Edinburgh and Glasgow, giving neat cuts and descriptions of various kinds of fences, gates, &c., with the cost of erection. The following extract from their list of prices may be useful:—

Iron and wire fence 3 feet 6 inches high, having wrought iron straining posts 1 3-8 inch square, every 75 yards, complete with screwed eye-bolts and nuts for straining the wires, and wrought-iron intermediate uprights, 1 1/4 by 1/4 iron, every 8 feet, having 6 horizontal wires:—

For horses, cattle and sheep, of No. 4 wire, 1s. 2d. per lineal yard.	
For cattle and sheep,	No. 5 wire, 1s. 1d. "
For do	No. 6 wire, 1s. "
For sheep,	No. 7 wire, 11d. "
For do.	No. 8 wire, 10d. "

Same fences for wood uprights, 6 horizontal wires, including staples:

For cattle and horses, of No. 4 wire, 7d. per lineal yard.	
For cattle and sheep,	No. 5 wire, 6d. "
For cattle and sheep,	No. 6 wire, 5d. "
For sheep,	No. 7 wire, 4d. "

If to include one wrought-iron straining pillar for every 75 yards, complete with screwed eye-bolts and nuts for straining the wires, 1d. per yard extra. These are the prices of materials "delivered free at Leith, Glasgow, Liverpool, and Hull"—printed instructions, illustrated by wood cuts, accompanying each order, by which any laborer can readily erect the fences.

According to the above prices, a fence designed for cattle and sheep, three and a half feet high, with six horizontal wires, would cost, if of No. 5 wire, about \$1.50 per rod; if of No. 6 wire, about \$1.25 per rod. Or the wires for the same kind of fence, for wood uprights or posts, including staples for fastening the wires, about 67 cts. per rod, if of No. 5 wire, and about 55 cents per rod if of No. 6 wire. It may be as well to remark here, that No. 4 wire is a fourth of an inch in diameter, No. 8, three-sixteenths, and the other numbers regularly intermediate. What would be the cost of importing these fences we are unable to say; but could they not be manufactured at as low a cost in this country, expense of transportation, duties, &c., considered, as they could be imported? If such fences could be erected here at the prices above named, they would not be more expensive in their first cost than the fences usually constructed in many sections, while their permanence and indestructibility would give them a decided advantage.

In our December number, Mr. W. PENN KINZER spoke of a kind of fence which is coming into use in New Jersey, as follows:

"The farmers of Salem county, New-Jersey, are now partial to a kind of worm-fence, without stakes and riders; they insert an iron rod three-eighths of an inch thick, through the corners; the rod is turned at the bottom, and bent over the top rail so tight as to make the fence withstand a tempest. In this fence there is perhaps more economy than any other now in use; it occupies about half the ground taken up by a stake and rider fence. Five to six rails are sufficient for a panel, making a handsome fence, resembling a wave, at a distance."

Mr. B. W. COOPER, at Haddonfield, N. J., writes us in reference to Mr. KINZER's communication, "This fence is not confined to Salem County, but is gaining favor in other parts of New-Jersey. A decided improvement has been made in the mode of construction over that described by Mr. Kinzer. The iron rods (three-eighths inch square is preferred,) are cut by a smith into suitable lengths, say 4 1/4 or 5 feet, and punched near the top end to receive a key; a hole about 1 1/4 in. deep is drilled into the stone on which the fence rests, in which the rod is inserted, and secured by running in melted lead. Holes are bored at each end of the rails, through which the rods are passed. Before placing on the top rail, put on blocks about six inches long and of sufficient thickness to elevate the rail to the top of the rod, then secure by inserting the key. I have erected about 100 panels of this kind of fence, seven rails high, which has withstood tornadoes, and to use the language of Mr. Kinzer, it is "almost indestructible." One hundred of three-eighths iron, cost \$5.50, and made 47 rods and 5 feet in length. Blacksmith's bill, for cutting, punching, and keys, 87 1/2 cts."

Mr. KINZER, in the communication above-mentioned, speaks of a "neat article" of cast iron, designed to take the place of posts, which has lately been brought into notice in Pennsylvania. Will he have the goodness to inform us of the cost of such posts?

LONGEVITY OF PEACH TREES.—The Genesee Farmer says, "We have just been shown a collection of various fruits, by Col. Colby, of Ogden, and among others, a fair looking natural peach, from a tree forty years old, yet healthy and productive."

## MANAGEMENT OF POULTRY.

FREQUENT inquiries are made by farmers, as to the cheapest and best mode of managing poultry, and the question is not always satisfactorily answered. The most perfect mode is to have a fine, airy, well-lighted poultry-house, connected with an ample, well fenced yard. Hens may be also kept confined three-quarters of the day in a poultry-house only, if it is fully lighted and cleaned daily, without the addition of the yard, with a run of an hour or two in the adjacent grounds, before going to roost. The third and more common way, is to let them run at large at all times, picking up what they can find for a subsistence. Each of these modes has its advantages and objections.

1. The advantages of a house and large yard are,—the hens are perfectly provided with food, and room for exercise, and all the other comforts of life, without interfering with other parts of the premises. The disadvantages are, the cost of the house, the cost of a high, picketted, yard fence, and the land occupied where the yard is large, as it must be, to answer properly the intended purpose; besides the expense and care of providing a constant supply of food and water.

2. The advantages of a house without a yard are,—the expense of a large yard is avoided; and the intrusions of the hens elsewhere are entirely prevented, as during the short interval of their liberation each day, they pass hastily through garden or other grounds, picking up only insects, and avoiding scratching, and returning of their own accord to their resting places for the night. The objections are, the indispensable necessity of a well aired, well lighted, perfectly clean house, requiring large windows, care in ventilation, daily sweeping, and frequent white-washing internally. A constant supply of food and water must be given. This mode is also apt to cause hens to eat the fresh eggs, as well as to render them less prolific.

3. Suffering hens to run at large releases the owner from all care in feeding them. They pick up refuse matter from the kitchen and elsewhere, devour insects, and devour the seeds of various weeds growing in waste grounds and unfrequented places. But there are several objections to this mode of management, or rather, absence of management. Being compelled to pick up their own living, they often pick in the wrong place, and pilfered grain and uprooted garden seeds are the result. They often choose wrong places for roosting, as the backs of carriage seats, over saddles, and on farm tools, to the serious annoyance of the owner. Sometimes, too, a large nest of eggs is spoiled, in consequence of being located in some unknown hiding place.

Each of these three modes having its merits and disadvantages, it becomes necessary to choose between them. This choice must be made according to circumstances. Those who wish to raise poultry and eggs in large quantities for market, and those who do not regard the cost of a house and yard, and who can procure plenty of feed, should choose the first mode. The second may be adopted in villages, or where little land can be afforded, and where at the same time there is some person in the family to give nearly constant attention to their wants, to see they are well supplied with food and water, that strict cleanliness is uniformly preserved, and that the eggs are secured before they are devoured by the hens themselves. The third is more applicable to large farms, where the barn is remote from the garden, and where the carriage house, granary, tool-house, &c., may be entirely excluded from their

visits, and consequent defilement. There is so much refuse matter around barns which they may pick up as food, that farmers may usually have a dozen or two of hens with scarcely any cost whatever. It will, however, be found a very great convenience, which we wish here strongly to recommend, to have a small apartment for their accommodation at nights, built as a *lean-to*, on the south side of the barn, and properly lighted with windows. If this opens to the inner part of the barn, and also to the barn-yard, they may at any time pass out to either place unrestrained; and as soon as they become accustomed to their lodgings, they will at once resort there, without any trouble, or without any danger of annoying the farmer by depositing their slime elsewhere. Where a hen-house without a yard has been built, it is often difficult to induce the hens in winter to frequent it; a difficulty which would vanish if they could pass to it freely and immediately from the barn they frequent during the day.

Hens may often be easily confined to the barn and barn-yard, by a row of short pickets set on the high tight fence which surrounds the cattle yard. T.

## A FEW WORDS ABOUT LANDMARKS.

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MESSRS. EDITORS—Perhaps it may be useful to the farmer, and not aside from the general object of the *Cultivator*, to offer a few remarks on this subject. It is not only important that land be well cultivated, but that the owner know definitely his limits. By strict attention to the maintenance of boundaries, much collision would be avoided, and the quiet and good feeling among neighbors, in many instances, essentially promoted.

The original corner, for instance, may have been a tree, which for some cause has been cut and removed; the stump remains awhile to mark the spot, but at length it decays, and finally every vestige of it has disappeared. The surveyor is called on to run one or more lines, with a view to ascertain the corner, which he is generally supposed able to do by adjusting his compass to the ancient bearing of the line in question. This, however, is expecting more of the magnetic needle than it is able to accomplish, or will be, so long as the laws which govern its variation are but imperfectly understood, though an approximation to accuracy can usually be obtained. An experience of more than twenty years occasional practice in the various branches of surveying, has furnished repeated instances of the inconvenience and vexation resulting from the neglect complained of in this article.

Akin to this subject, is the mode sometimes adopted of describing land or roads as follows: Beginning *near* such a place or thing. One of the roads in a certain town is recorded thus, "Beginning *near* the sign-post of S—H—'s tavern." Now, aside from the difficulty of ascertaining the precise location of "*near*," the said sign post has been missing for 30 or 40 years; and if coming events cast their shadows before, sign posts, I mean, of course, those where *rum* is sold, are not likely to be the most "permanent fixtures" for boundaries hereafter. I trust, Messrs. Editors, that the preservation of "the ancient landmarks" will not be thought a matter of little or no importance, but receive a share at least of that attention to which it is entitled.

G. BUTLER.

Clinton, Jan. 1, 1847.



## CULTIVATION OF WHEAT.

Is there not some great defect in our general mode of wheat culture? In the early settlement of the country, when the soil was first brought into cultivation, wheat was readily produced in almost every section; but the production of this grain soon began to decline, and with the progress of population westward, it may be said the wheat region has been constantly receding in that direction. This circumstance would, long ago, have excited alarm, but for the vast extent of territory in our possession still unoccupied. The question, however, may even now excite some anxiety—Whence are the future inhabitants of our country to derive their bread, when there shall no longer remain *new land* to cultivate?

Our soil, in regard to the production of wheat, presents quite a contrast, in some respects, to that of some of the countries of Europe. There, soils which now yield bountiful harvests, have borne the same crop, at various intervals, for a thousand years or more. In our oldest districts, where cultivation was only commenced a little more than two hundred years since, the culture of wheat is mostly discontinued, and where carried on at all, yields in general but poor returns.

In view of these facts, it appears to us that we may derive some useful hints from attention to the best modes of European wheat-husbandry. In the best systems which prevail in England, for instance, there are at least two points which we think might be very advantageously adopted in this country. We mean the more perfect preparation of the soil, and the special adaptation of manures to the production of wheat.

We have been led to these remarks by the perusal of an excellent essay on the cultivation of wheat, in a late number of the *Farmer's Magazine*. In relation to the requisites for the growth of wheat, the writer observes that the plant is not one easy to cultivate, "for though it thrives in a stiff soil, it may be too hard; though it will grow in a loose sand, if properly attended to, it is easily thrown out; though it thrives in a hot summer, it may be burnt up for want of moisture; and though wet is injurious to it, it still requires, at certain seasons, considerable moisture. Indeed, it may be said to require a medium of soil, condition, and climate, to be brought to full perfection. If the soil be too poor, it is short and sickly; if it be too rich, it lodges or mildews; and no plant requires the watchful eye of the cultivator more carefully or more assiduously."

He speaks of the improvements in cultivation which have been adopted in England within a few years, and observes it was formerly thought that wheat could only be grown on strong retentive soils, but that it is now successfully cultivated on nearly all light soils as well as on strong. He says the "four-course," or alternating system of farming, "established the fact, that while the clover root was a better bed for wheat than a fallow, the sheep's treading and droppings were a much better dressing than lime or barn-yard manure; and that blowing sand could, in eight or even four years, be adapted to the production of as many bushels of wheat to the acre as the naked, open, laborious fallow, and with this difference, that on the latter there were the accumulation of two years' rent, tithes, taxes, and labor; on the former there was a stock of sheep to sell, and no labor beyond the plowing and sowing."

In this country, so far as our observation goes, no better preparation can be had for a wheat crop, than a clover-ley depastured by sheep. The action of clover on sandy soils, is to render them more compact. In the

language of this writer, "such is the consolidating power of the trifolia, that the very lightest soils will sometimes become so hard as [when very dry] to defy the power even of a Ransom's or a Howard's plow to penetrate."

He cites the analysis of Sprengel, by which it appears that the principal ingredient in wheat of a fixed character, is phosphorus, and observes—"when it is considered how much of that material is drained from the soil year after year, and sold off the farm, it is not surprising that we hear farmers complain of 'old going land' and 'spent soil!'"

The most suitable manure for wheat, he believes to be bones, in connection with the droppings of sheep left while feeding on the land; and where this course of culture has been adopted, he says good farmers in all parts of the kingdom have come to the unanimous conclusion that no soil is too light to grow thriving crops of wheat, if only it be properly tilled. "In the bones, the phosphorus, which is so essential to the formation of the grain, is supplied, and the urine and dung of the sheep supply the other constituents necessary for perfecting the plant in straw and grain. Many examples of the successful application of bones to wheat, it is said, might be related; and the experiments of SIR SAMUEL CROMPTON are referred to, "who has on a light and naturally poor sand, obtained most magnificent crops of wheat."

Bones are prepared for use as manure either by being crushed in mills designed for the purpose, or by being dissolved in sulphuric acid. The latter seems now to be considered, in England, the better course, and is being generally adopted. Prof. J. P. NORTON, in a communication to the *Cultivator* for 1845, page 266, gives the following mode of preparing bones with acid: The bones are placed in a conical heap on a bed of ashes, and the acid slowly poured on. Twelve pounds of acid per bushel is the quantity applied; but previous to its use it is diluted with once or twice its bulk of water. The bones will absorb nearly the whole of the acid; the outside of the heap should then be turned inside and the whole will in a short time become soft and fit to mix with ashes for drilling or sowing.

They are sometimes applied in a liquid state, and are also used alone as top-dressing. The quantity applied per acre is from sixteen to twenty-five bushels.

The writer of the essay, of which we have been speaking above, has no confidence in the system of "dibbling and thin sowing," concerning which we have lately heard much; and though he thinks it certain that under the necessity of economy which at the present time exists, great efforts will be made to adopt it. He deems it equally certain that it will end in failure. He says—"We are in possession of a series of experiments which have been made, and the results brought to the test of the bushel and scale, which shows the dibbling system a perfect failure, and which at a future opportunity we shall give."

He is in favor of drilling, of which he thus speaks:

"The drill is the sheet-anchor of wheat sowing. The seed is deposited with the accuracy and regularity of clock-work; the quantity can be regulated to a fraction—a peck per acre; the rows are straight, parallel and regular; the depth can be adjusted to a trifle; and the whole apparatus adapted to the necessities, capabilities and circumstances of the soil and season, with the mere loosening of a screw, or the turning of a handle."

Drills, he says, are in use, which "are as perfect, both for mechanism and practical effect, as a chronometer or a steam-engine." So complete is their execution, that in sowing a twenty-acre field, when the surface is favorable, "scarcely a variation of an inch from a straight line occurs in the whole piece."

We have, on former occasions, spoken of the advantages of this system of wheat culture; and have mentioned the example of Mr. NOBLE, of Massillon, Ohio, who practices drilling extensively, and with excellent results. Some of the finest wheat crops we have ever seen, were produced on his farm by this mode. He informs us that the longer he continues this practice, the more he is in favor of it. He has constructed a drill which operates well—doing the work with precision and despatch. We believe the system of drilling wheat is worthy of general adoption, and we hope to see it speedily introduced into our principal wheat districts.

As a *protection against smut and vermin*, the writer of the essay recommends arsenic. We have formerly used this substance as a preventive of smut, but cannot say that it was found any more effective than blue vitriol or sulphate of copper; either substance will answer the purpose well, if properly used. But for protecting the seed against insects and vermin, we think it probable the arsenic would be preferable, though we cannot speak on this point from our own experience. The following is the mode of using the arsenic:

"Take to every bushel of corn [grain] one ounce of arsenic, dissolve it in one pint of water, adding half a pound of salt. Spread the corn on a level floor, and pour the liquor on the wheat, continually stirring it un-

til the whole is wetted, or thoroughly damped. Then apply and mix quicklime until it is sufficiently dry to sow, and we will guarantee that not an ear of smut will be visible. The seed is also secure from crows and vermin; and the arsenic, so destructive to animal life, seems to have no effect of an injurious tendency on the seed wheat."

The average yield of wheat per acre, on a clover-ley, under good management, is put down at 30 bushels, and the expense of cultivation is given as follows:

	£	s.	d.
Plowing, .....	0	6	0
Sowing, .....	0	3	0
Harrowing, .....	0	1	0
Rolling, .....	0	1	6
Seed, .....	0	18	0
Weeding, .....	0	4	0
Straw for harvesting and all expenses up to marketing.			

£1 13 6

This would give the cost per bushel 1s. 1½d., or about 26 cents. The common opinion, we believe, is that wheat is produced much cheaper in this country than it can be in England. This is at least questionable; at any rate we doubt whether many of our farmers can show that they have produced it at less expense than the above estimate shows. On the other hand, it is not improbable that with their improved modes of culture, and the greater average yield, the English farmers may have the advantage of the American on the score of cheapness; and we ought to regard this as an additional inducement for the adoption of a better system.

### POUDRETTE ON INDIAN CORN.

EDS. CULTIVATOR—In the March No. of the Cultivator, 1846, you gave an experiment, made by Mr. SHERMAN, with poudrette placed on corn in the hill; the result of which was so different from what I had supposed it would have been, judging from some experiments I had made with it upon wheat; and also from the unanimous opinion entertained by my neighbors of its value, that I determined to try whether the increased quantity of corn produced by this manure, would cost every one the same sum it did your correspondent. To do this, I selected a part of my field, an acre of ground, and manured one half of it in the hill, with five bushels of poudrette, manufactured in Philadelphia. The rows and hills were each four feet apart. The ground selected was, as near as I could judge, of the same quality; if there was any difference, it was in favor of that part not manured. The soil was a light micaceous loam, but quite thin, as you will see by the yield. It came up finely; the corn on the part that was manured, grew vigorously, keeping far ahead of the other, throughout the season, and ripening at least one week earlier. When harvested, the part that was manured, yielded thirty three baskets of ears, making 16 bushels of shelled corn, and the other half only 17 baskets, or 8 bushels—leaving me 8 bushels of sound corn to pay for the poudrette. The Dr. and Cr. account would stand thus:

8 bushels corn at 60 cts per bushel is..... \$4.80  
Extra fodder—(there was at least double the quantity on this part that there was on the other)..... 1.00

—  
\$5.80

Dr. To 5 bus. poudrette, 35c. is..... 1.75  
Spreading the same,..... 0.10

Husking, hauling and shelling 8 bus. 3c. 0.24

2.09

Gain by using this manure (per ½ acre) \$3.71

A part of the same field, was manured, in the same manner with guano, and at the same cost per acre. One barrel of guano was mixed with two of unlixivated ashes, and the same quantity of clear sand, and spread on one and an half acres of ground. This part neither grew so well, nor did it yield so well as that along side of it, which had been manured with poudrette. Although we took great pains to sift and mix it thoroughly, yet many of the hills were killed, and some so stunted that they did not recover throughout the season.

One of my neighbors, seeing what poudrette had done for me, for two years in succession, on my wheat crop, planted some two or three acres, of as poor land as you could find any where, (in fact the soil had been entirely washed away) with what we call Canada corn, and manured it in the hill with this manure; a part he left unmanured. On the first part he had a fair crop; but, upon the other, there was not enough, I had almost said, to pay him for his seed, certainly not for his labor.

What these manures may do, when used upon soils of a more productive quality, I do not know, but I am well assured, that when used upon thin soils, this is a most valuable manure; and those of us in this neighborhood who have used it, in this manner, firmly believe that we receive the price of our labor and expenses, in the increased value of our provender alone. The coming season I shall plant my corn on soils of various degrees of fertility, and shall then test the matter more fully.

Lower Dublin, Pa., Dec. 19, 1846. PENNEPACK.



## CULTURE OF MADDER—BERKSHIRE HOGS.

MR. LUTHER TUCKER—Agreeably to your request, I will endeavor to give, through the columns of the Cultivator, what I consider to be the best method of cultivating and preparing Madder for market.

In the first place, the land most suitable for its growth, is a deep, rich, sand loam—moist, but not wet. A light sandy or gravelly soil would not be good, neither a stiff clay. It should be planted as early in the spring as the land can be conveniently prepared. The land should be well plowed, and if not rich, should be made so with good barn yard manure or swamp earth. I plant in hills, six feet apart one way, and eight the other. The hill should be made two feet across at the base, and raised one foot high; the seed laid on, and covered about two or three inches deep. As soon as it is up, it should be carefully hoed and cleared from weeds. After it is up about a foot high, the tops fall and spread in all directions over the hill. A light coat of dirt is then thrown on, covering all except within four or five inches of the ends of the tops, which being so covered become roots, which send forth other tops and innumerable small roots from the joints of those covered up, and these form in the hill a compact mass of roots by the time it is ready to harvest. This should be repeated two or three times each season for the first three seasons. The last covering should be about the first of September. There will then be time for the tops to send forth shoots to come up early in the spring. In this way nearly the whole growth of the top is converted into roots. The fourth or last season, requires little or nothing to be done.—The reason for planting the hills further one way than the other, is to give room to drive between the rows with a team, as I generally draw on manure and put a shovel full on each hill before earthing. The labor of forming the hills for the seed, can be performed in a great measure with a plow. Earthing the hills is done by throwing on to them the earth plowed up between the hills, with a shovel or spade. This being done for three successive seasons, forms a large hill.

I commence digging about the first of September. The tops in the first place are cut off close to the root with a sharp hoe. I then plow a deep furrow around the hill, picking up what loose roots may turn out—then run a furrow through the body of the hill, shaking the dirt from the roots with a dung-fork. They are then picked apart, taken to a large vat or tub, washed, put into a kiln and thoroughly dried. I grind it in a cast iron mill, constructed upon the principle of a pepper mill. It may be ground in a grist mill to advantage, it being necessary to run slower than when grinding grain, to prevent heating. An oil mill grinds it well. It is then ready for use.

The quantity of seed to the hill can be judged of by the person planting. It takes six bushels to plant an acre. I preserve it through the winter by placing it in a heap and covering it with earth. I can furnish seed to order, from the middle of September to the first of May, boxed and delivered at Utica, for \$2.50 per bushel. It will not be injured if conveyed in the winter, if buried immediately in the earth when received.

I think the rich bottom lands on rivers, that grow heavy crops of corn, would be admirably adapted to the cultivation of Madder. The amount raised to the acre, will depend in a great measure upon the goodness of the land and good culture. It is not subject to be destroyed by drouth or frost, or the multitude of enemies that assail many of the farmer's crops. J. EATON.

West-Winfield, N. Y., Dec. 18, 1846.

[In relation to our remarks on Berkshire swine, in the October and November numbers, we advise our readers to compare them with the statements in the following communication, and see which will best "square" with their experience and observation.—Eds.]

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MESSRS. EDITORS—In the October and November numbers of the Cultivator, I noticed some remarks on swine, a part of which do not exactly square with my notions on the subject.

I am one who suffered to some extent, by the "excitement" which was got up in relation to Berkshire hogs; and having lost by them, I am disposed, as far as I can, to save others from a like misfortune. I sustained a considerable loss, in consequence of the prices I paid; but a greater, by keeping a worthless animal for several years. Having procured this breed of swine at a large expense, I was unwilling to give it up without a thorough trial; and so I continued to breed and keep Berkshires for four or five years, and tried hard to like them.

I think the Berkshires may be good "for supplying the market with meat to eat fresh;" but at the same time, I consider them less profitable for the farmer to raise, even for this purpose, than some other breeds.

My objections to this breed of swine are not founded on their color. This is all moon-shine. If an animal will answer well the purpose for which he is kept, I care not whether he be black, white or "green."

\* The following are some of my objections to the Berkshires. 1. They are generally very small; though I sometimes had, perhaps, one from a litter, that at eighteen months old, would weigh from 400 to 500 pounds; while the others, at the same age, would not exceed 200 or 250 pounds. 2. I never found any "fine delicate meat for families," from them. There is no clear fat meat in the hog, and what little fat there is, is soft and oily. 3. They furnished me but very little lard. 4. I found them great eaters. I may be thought heterodox; but I had as lief rear and fatten an ordinary hog, which at eighteen months old, will weigh 400 pounds, as a Berkshire, which at the same age, will weigh but 200 pounds. And indeed, I think there is far less difference in the cost of fattening a large hog, and a small one, of any breed, than is generally supposed.

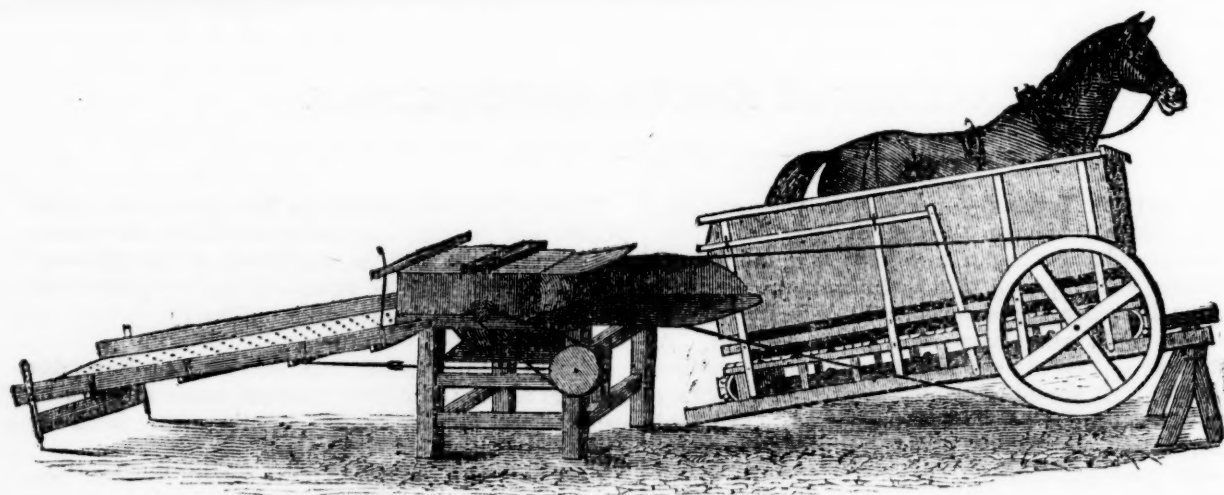
For these and other reasons, "too numerous to mention," I consider the Berkshires, the poorest breed of swine, that I have ever tried.

I have now a breed of white hogs, without a name, which I procured by several crosses, which at the same age, will weigh about twice as much as common Berkshires, and certainly not at a greater cost of keeping. At the same time, the meat is far better. These, at eighteen months old, will weigh from 400 to 500 pounds. I last spring sold six pigs, being all of a litter which lived, (a part of the litter died in a cold night) and which were dropped on the 22d of March. One of them was killed on the 29th day of October, and weighed 315 pounds. Two were killed on the 30th of November, and weighed, one 320 pounds, and the other 334 pounds. A fourth was killed on the 5th of December and weighed 317 pounds. One was purchased to keep over the winter, and from the other I have not heard. I think it would not be easy to find four Berkshires, or indeed four pigs of any other breed, which at the same age, beat these,

Respectfully yours,

RALPH R. PHELPS.

Manchester, Ct., Dec. 1846.



WHEELER'S HORSE-POWER AND THRESHER.

THE advantages of this machine consist in its cheapness, portableness, and effectiveness. The cost of the whole apparatus, ready for threshing, as above delineated, is \$110—or for the different parts as follows: \$75 for the horse-power, \$28 for the thresher, and \$7 for the “shaker.” It is so light that two men can readily put it on and off a wagon; but at the same time it is very strong and substantial. As above shown, it is adapted to the use of one horse, and the performance of the machine with this power, is equal to threshing one hundred bushels of wheat, or two hundred bushels of oats in a day; but to do this a change of horses should be made every three hours. It requires but little manual labor to use it; for grain in bundles, two men and a boy are sufficient. The simple contrivance called a “shaker,” which in the figure is shown attached to the thresher, saves fully the work of one hand, and besides leaves the grain entirely free from straw, and so disposes of the straw that no grain is wasted.

We have lately witnessed the operation of this machine, and are of the opinion that it is capable of performing more work in proportion to the force employed, than any other with which we are acquainted. The horse-power is much liked by those who are acquainted with it. It is easily applied to various purposes, and is the kind which is mostly used for sawing wood at the different railroad stations between this city and Boston. It runs very easily; but by means of a brake, which is attached to it in a very convenient manner, its motion is at all times perfectly under the control of the person in charge of the machine; and whatever may be the speed, it can be checked as desired.

The horse-power can be readily fitted for working two horses abreast—the only alteration necessary, being to increase the width of the rotary platform on which the horse stands, and lengthen the main or driving shaft. [For particulars see advertisement.]

#### CULTURE AND USES OF THE CARROT.

WE would thus seasonably call the attention of farmers to the advantages of the carrot crop. Whether the potato will continue to be affected with the malady which has attacked it for a few years past, is more than any one can tell. But it is best, in the language of the homely proverb, “to provide for the worst, though we hope for the best;” and on soils which are sufficiently friable, we should decidedly prefer the carrot, to grow as a substitute for the potato in feeding animals, to any other vegetable. It is true the carrot has not

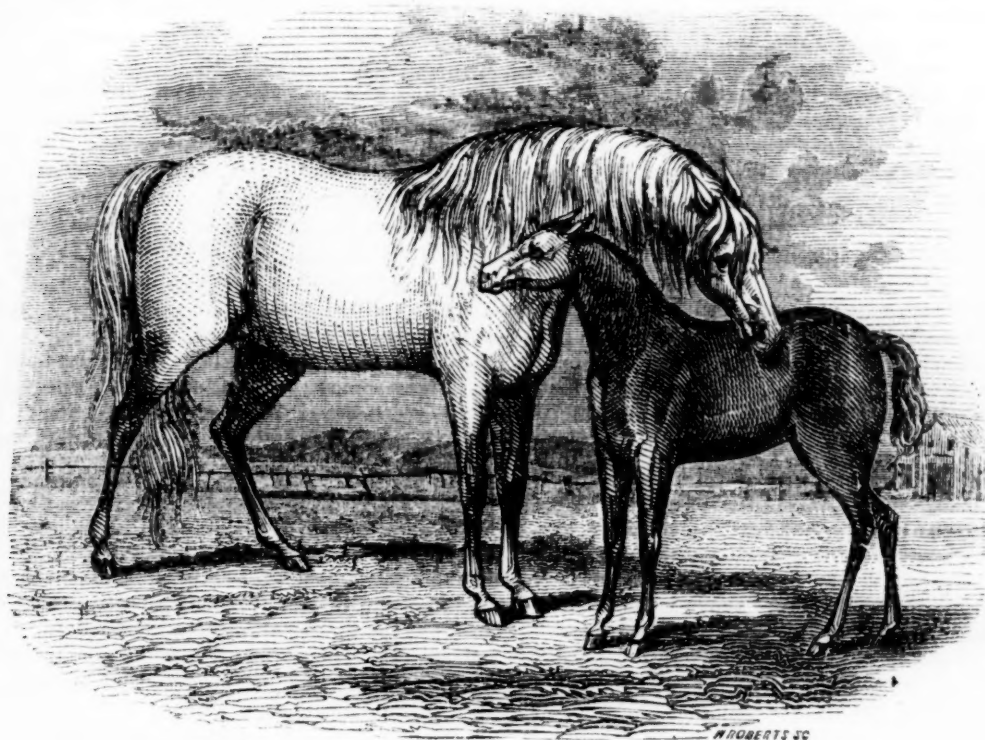
been altogether exempt from the blight and tendency to premature decay with which several species of plants have been lately attacked; but so far as our observation has gone, the white or Belgian carrot is the only variety which has suffered to such an extent as to occasion much loss. This kind has been supposed to yield more than the orange, and other kinds, with less labor in cultivation, and we think this is the fact, where the crop remains perfectly healthy; but the white is acknowledged to be less nutritive than the others; so that with the liability to disease, and the inferior quality of the white, we should unhesitatingly recommend the orange variety.

Carrots are known to be excellent food for milch cows, and also for horses. We have formerly been in the habit of using them for the former purpose, and decidedly prefer them for making rich milk and high colored and well flavored butter, to any other food we ever used in the winter season. For horses, we know the opinion of those who have used them is highly favorable. Mr. RISLEY, of Chautauque county, raises annually great quantities of carrots, and has been the most successful competitor for premiums on this crop, of any man in the state. He has, in several instances, produced more than 1,000 bushels to the acre. We are informed that he feeds them largely to his horses. We have been lately told by a man who has been sometime in his employ, that the horses fed on carrots are more healthy and active than when fed with anything else. In his own language, the carrots will “make an old horse appear like a colt.” He stated that they usually gave from a peck to a half a bushel of carrots to each horse daily, with about half the quantity of grain which is given where no carrots are allowed. Horses which have been kept on grain in the ordinary way, when put on their allowance of carrots, it is said, very quickly improve in spirit, and in the appearance of their coats; and if the labor they are required to perform is not very hard, it is preferred to give them only the allowance of carrots, with but little grain.

INCOME OF THE STATE OF NEW-YORK.—It appears by the census of 1845, that the total agricultural products of the state of New-York, together with the income of all mechanics and manufacturers, and the amount earned by the public conveyance of merchandise and travellers, amounts to \$280 millions of dollars.

TO KNOW GOOD FLOUR.—Good flour, when squeezed by the hand, bears the minute marks of the fingers and skin much longer than when bad or adulterated.





"LADY MESSENGER," AND HER COLT "MORGAN MESSENGER."

THE improvement of our breeds of horses for various purposes, is an object which deserves attention. Of the whole number of horses reared in the country, the proportion of good ones is very small; hence the remark is frequently made that the rearing of horses is unprofitable. But if the standard of value could be so raised that the average would be equal to that of our best, the business would yield good returns.

The origin of our most valuable horses is not only a subject of interest to the curious, but it is also one of great practical importance. Like causes produce like effects; and a course which has produced improvement, may be safely relied on for the continuance of similar results.

The animals delineated in our cut are thought to have derived their excellencies chiefly from the "Messenger" and "Morgan" blood which they possess; therefore, in introducing a notice of them, we have availed ourselves of the opportunity to offer a few remarks in regard to the history of their distinguished progenitors.

Messenger was imported by Mr. BENDER, and landed at New-York in 1791. He was bred by JOHN PRATT, Esq., of New Market, England; was foaled in 1780; by Mambrino, dam by Turf—Regulus—Starling—Fox—(dam of Snap)—Gipsey, by Bay Bolton—Duke of Newcastle's Turk—Taffolet Barb—Place's White Turk—Natural Barb mare. [*Am. Turf Register*, vol. VI., p. 105.]

As a racer, Messenger was not particularly eminent, though he won several matches when he was from four to five years old; but we have no account of his having appeared on the turf after his arrival in this country. As a stock-getter he was justly celebrated. He was the sire of Miller's Damsel, and several other noted racers; but he derived his greatest renown on account of the superiority of his progeny from common or "cold-blooded" mares, as *business* horses. As strong, long-lived, and enduring roadsters, and as fast trotters, they have seldom, if ever, been equalled.

In a letter to J. S. SKINNER, Esq., (then editor of the *Am. Turf Register*,) Mr. VAN RANST, who was

for several years owner of Messenger, gives the following account of him:

"Messenger when landed, was a light dapple gray, but afterwards became white. He had a large, full, black eye, remarkably brilliant. His movement and action were elegant. His standing never careless; I never saw him resting himself on three legs, but whether the ground was rough or smooth, he always stood upon it—prompt, erect, and lofty.

"Messenger was imported by Mr. Benger in 1791, and landed in this city, [New-York,] where I saw him shortly after, and my mind was fixed on his being much the best horse I had ever seen, and said nothing about price, as I was confident he was over my mark.

"Mr. Benger shortly after took him to Philadelphia, and stood him two seasons at Shamney Bridge, not far from Bristol. After which Mr. Henry Astor, of this city, purchased and stood him two seasons on Long Island, at Philip Platt's; the next spring I bought one-third, and took him to Pine Plains, Dutchess county. After which I bought Mr. Astor out, for which I paid \$2,750. I hired said horse at different stands; the farthest south was Cooper's Ferry, opposite Philadelphia, at \$1000 per season, free of expenses, until the time of his death, Jan. 28, 1808, at the farm of Mr. Townsend Cock, L. I., who had hired him three seasons of the time."

By reference to the above dates it will be seen that Messenger, at the time of his death, was twenty-eight years old; and as his death occurred thirty-nine years ago, there is no probability that there is at this time any of his immediate offspring in existence. His descendants, however, even where they have only an eighth or a sixteenth of his blood, often exhibit his characteristics in a striking manner.

The origin of the valuable stock of Horses called "Morgans" has been the subject of some controversy, and in the minds of some, the question may not yet perhaps, be fully settled. We deem it not improper to say, however, that we think the following facts have been ascertained:—That the animal commonly known as the

"Old Justin Morgan horse," was foaled at West Springfield, (Mass.,) or that neighborhood, in 1793: that his sire was a horse called "True Briton, or Beautiful Bay," said to have been formerly owned by Gen. JAMES DE LANCY, of New-York, (see *Cultivator*, vol. ix., p. 110:) that his dam was owned by JUSTIN MORGAN; that she was got by a horse called Diamond; he by the "Church horse;" and he by the imported Wild-air.

The last named horse was much celebrated as the sire of valuable stock. He was imported by Gen. DE LANCY, in 1760 or '61, and after having been used as a stallion in this country, was re-shipped to England, in 1773. In the *New-York Sporting Magazine*, vol. i., p. 5, we find the following:

"He [Wild-air] was the property [previous to his coming to this country,] of William Swinburn, and Jen-nison Shafto, Esquires: was foaled in 1753; by Old Cade, son of the Godolphin Arabian; his dam by Steady, a son of Flying Childers, out of the famous Miss Belvoir; his grandam by Old Partner; great grandam by Greyhound—Makeless—Counsellor—Brimmer, out of a daughter of Mr. Place's White Turk."

"True Briton, or Beautiful Bay," above mentioned,\* was said to have been got by the imported horse Traveller, or, (as sometimes called,) Morton's Traveller. In the *American Turf Register*, vol. vi., p. 423, his pedigree is given as follows:

"Morton's Traveller, (imported,) was got by the celebrated O'Kelly's, [or English] Eclipse—King Herod—Blank—Old Cade—by the Godolphin Arabian. King Herod was by Tartar, his dam Cypron, by Blaze, a son of the Great Flying Childers. Blank was by the Godolphin Arabian."

Thus it appears that the origin of the "Justin Morgan horse," was a mixture of the Wild-air and Traveller blood with "country" mares, whose blood cannot be fully traced.

The animals from which our figures were taken, are now the property of Gen. SILAS M. BURROUGHS, of Medina, Orleans county, N. Y. In reference to their qualities, we have the following communication.

.....

MESSRS. EDITORS—I have read with interest several articles in your valuable journal relating to the Morgan horse Black Hawk, owned by Mr. Hill, of Bridport, Vermont. You will doubtless be gratified to learn that Gen. Silas M. Burroughs, of Medina, in this county, has recently procured from Vermont four colts got by Black Hawk. One, a year old last spring, bred by S. W. Jewett, Esq., of Weybridge, Vermont, out of "Lady Messenger," a descendant of the imported horse Messenger, whose stock is so justly celebrated for many valuable qualities: "Lady Messenger" is a beautiful animal, possessing the peculiar qualities of the Messenger blood in a very marked degree. I knew her when my uncle used her in his carriage, and she was the best performer on the road I ever saw. Mr. Jewett showed me the likeness of this noble animal, and the colt now owned by Gen. Burroughs. The likeness of the mare is remarkably faithful and correct.

The other three colts brought by Gen. B. from Vermont, are last spring's colts, one of which took the first premium at the Addison county fair in October last, and is the very best colt I ever saw. He has the remarkable proportions of the sire "Black Hawk," as described by Mr. Jewett, in his letter published in the *Cultivator*, vol. ii., (new series,) p. 196. This colt, which has the

most marked expression of intelligence imaginable, and which cannot fail to impress every observer, was bred by Mr. D. E. Hill, of Bridport.

The other two colts show evident marks of the Morgan blood, and are very beautiful and promising animals. Gen. B., I am informed, has sold the two last mentioned colts—one to Mr. Andrew Ellicott, of Shelby, in this county, who is esteemed as an excellent judge and connoisseur of the horse. The other was taken by Mr. William Gilson, of Shelby, who is a skilful horseman, of considerable reputation. An infusion of the Morgan blood cannot fail to produce great improvement in our present stock.

I will add that Mr. William V. Wilson, of Ridgeway, in this county, one of our most intelligent and enterprising farmers purchased at the State Fair at Utica, in 1845, the "Sir Henry," who took the 2d premium in the class of blood horses. This is a noble animal, combining the rare qualities of strength, elegance of action, beauty, and the very purest blood.

The farmers of Orleans are beginning to realize the importance of attending to the improvement of their stock of horses, and will, in due season, reap a handsome profit for their well directed enterprize.

Indeed, they are already beginning to command the attention of dealers in horses, and supply a very considerable number for eastern markets.

At the State Fair at Auburn, a premium was awarded to Messrs Gould, of Gaines, in this county, for the 2d best pair of matched horses; and the "Young Emperor," bred by Mr. Wm. Gilson, of Shelby, attracted deserved attention, receiving a discretionary premium of \$10.

PETER SAXE.

Yates, N. Y., Jan., 1847.

#### POTATO DISEASE.

All our observations in regard to this mysterious malady, confirm us more and more in the opinion some time since expressed, that nothing of any consequence has yet been ascertained as to its cause or prevention. The opinion seems to be gaining ground in Europe, as well as here, that it is an epidemic. In our December number we alluded to the fact, that other kinds of vegetation appeared, last season, to be attacked with blight in a similar manner to potatoes. The same appearance was noticed in the British islands. In the *Gardeners' Chronicle* of November 7th last, is a communication in reference to the potato crop in the Isle of Man. The writer says—"when the potato haulm was affected by the blight, the fern, rag-wort, nettles, and even part of the heath on the hills, were entirely destroyed."

The (Edinburgh) *Quarterly Journal of Agriculture* for October, in reference to this subject observes—

"The recurrence of the disease this season excited much surprise, for the potato plant has not shown so much vigor, and exhibited so beautiful and healthy a display of blossom for many years." \* \* \* "Whatever may be the nature of this affection which has overtaken the potato, it does not seem to be confined this season to that crop. The beans have had their leaves blackened, and their stems shrivelled by apparently the same cause, and the rottenness in the turnep may be safely ascribed to the same influence. The products of the flower garden have not escaped the affection, for the leaves of the pæony seem to us to have suffered from the same source. Even the forest trees are affected, as the appearance of the balsam poplar clearly indicated. And wild plants have been observed to suffer in a similar manner, as is instanced in the case of the common fern. So far as we can discern, the mysterious cause of this universal affection, is very much 'like the pestilence that walketh in darkness, and that wasteth at noon-day.'"

\* This "True Briton, or Beautiful Bay," is supposed not to be the horse registered under the name of *True Briton*, which was got by the imported Othello, &c. The horse now under consideration was a racer of celebrity, and won a great match near Philadelphia, in 1765. It is not probable that he was the sire of the "Old Morgan," because, supposing him to have been only five years old at the time of the race mentioned, he would have been thirty-two at the time the "Old Morgan" was begotten, in 1792.



## DOMESTIC ECONOMY.

**YEAST.**—The importance of yeast in domestic economy is well known. It consists of a variety of components; and among others of acetic and malic acids, alcohol, potash, lime, &c., but its essential and peculiar quality depends entirely on the presence of a portion of gluten or vegetable albumen, in a state of incipient decomposition.

If a pure solution of sugar in water be excluded from the air, it remains perfectly unchanged for any length of time. But if an organic substance in a state of slow decomposition, as for instance yeast, be introduced, the particles of sugar also become affected, and participate in the change, and carbonic acid and alcohol are the result.

After the yeast has converted a certain portion of the sugar compared with its own bulk, into alcohol, the yeast itself entirely disappears, and an additional quantity must be added to renew the fermentation. But when added to a mixture of flour with water, which contains gluten as well as sugar, a new portion of yeast is produced by the decomposition of the gluten of the flour. Thus yeast reproduces itself, by inducing the vinous fermentation in substances containing gluten and sugar. Thus, in a brewery, the quantity of yeast continually increases.

The presence of water is necessary for sustaining the properties of yeast; hence in a dried state it may be kept sometimes for months. Its action is also arrested by a temperature equal to that of boiling water, or greater; hence the fermentation of dough is at once arrested by baking. Hence, also, in drying solid yeast for preservation, too great a heat will at once destroy it.

In making bread, yeast operates in rendering it more light and porous, by the carbonic acid gas which is liberated, forming innumerable cavities of air in all parts of the loaf. A similar effect is produced in a more rapid degree, by the mixture of soda and tartaric acid or cream of tartar, and applying them in a dry state to the dough. Carbonic acid is abundantly liberated by the union of the acid and soda, and the bread or cake rendered very light; and a similar result is finely produced in making buckwheat cakes, by using buttermilk and saleratus, the acid of the milk freeing the carbonic acid gas from the saleratus.

**MODE OF MAKING YEAST.**—The following mode, which is found very convenient in practice, was stated to us by a notable housewife. One quart of hops is boiled about three hours with about seven gallons of water; after that the resulting liquid is passed through a cullender on three quarts of Indian meal, or so much that the mixture will be like *batter*. Half a tea-cup of salt is added, and when cooled to new milk warmth, half a pint of yeast. After stirring well, it stands 15 or 20 hours, and Indian meal added till of the consistency of dough, when cakes, three inches in diameter and half an inch thick are made from it, and dried on a board by the fire; much heat will destroy the yeast, and if not dried in two or three days, fermentation will proceed so far as to destroy it. These cakes will be good for three months; one of them soaked half an hour in warm, not hot water, will be enough for a large loaf.

The yeast prepared by the Hungarians is similar, and will keep, it is said, a whole year. During the summer season, they boil a quantity of wheat bran and hops in water; the decoction is not long in fermenting, and when this has taken place, they throw in a sufficient portion of bran to form the whole into a thick paste, which they work into balls, and dry by a slow heat.

T.

**HUMBUGS—PRESERVING TOMATOES.**—The publication of untried experiments, with all the assumed assurance of actual truth, has become quite an evil. Some one has given directions for preserving tomatoes for winter use, by stewing and seasoning, and then sealing air-tight in small jars. This receipt has been copied and gone the rounds of the newspapers throughout the country. A very skilful housewife has tried it in the best and most careful manner, scrupulously observing all the particulars. On opening her jars early in winter, she found the tomatoes completely fermented, sour as vinegar, and of course good for nothing. T.

**HOMMONY.**—This article is usually prepared by scalding the hardest and flintiest corn, and afterwards pounding and breaking it in a large mortar till the hulls are so loosened that they may be separated by winnowing. It is a slow and tedious process to prepare it in this manner, though when the excellence of the article is known, it will not be given up on this account. Mr. BEMENT has a mill in operation at his "Three Hills" farm, which reduces corn to various degrees of fineness, and by being passed through sieves of different construction, it is had either in the shape and size of "samp" or homminy, as is wished. In passing through the mill, most of the hulls are taken off, and by putting the crushed grain in water and stirring it, before the cooking is commenced, the loose hulls float, and may be skimmed off. We have tried some of this hommony, and find it equally as good as that made by pounding, excepting that it is not quite as clear of hulls. It is kept for sale by LAISDELL, No. 9, South-Pearl street.

**SOUR KROUT.**—A person who is familiar with the manufacture of this article, so much esteemed by the Dutch and other people, whose taste has become habituated to it, has furnished us with the following, in regard to its preparation:—Select sound cabbages, which after having been divested of their outside leaves; must be cut fine; place in the bottom of the barrel or tub designed to receive it, a layer of about six inches in thickness, sprinkling on fine salt, at the rate of about a pint to the barrel; then pound it down with a stick prepared for the purpose, and add another layer, and pound down as before, and so on till the vessel is full. Put a weight on the top to press it down. The cabbage will form liquor which will cover it. It is fit for use in four or five days, and will keep through the winter. It is eaten cold, or heated through, and a little vinegar added.

**RECIPT FOR CURING HAMs.**—7 lbs. coarse salt, 5 lbs. brown sugar, 2 oz. salt petre,  $\frac{1}{2}$  oz. pearl ash, 4 gallons of water. Boil all together and scum the pickle when cold. Put it on the meat. Hams to remain in 8 weeks—beef 3 weeks. The above is for 100 lbs. weight. It is said that hams cured by this mode are of superior quality. It is called the "Newbold receipt," a person of that name in New-Jersey having, as it is said, attained great celebrity for the excellence of his hams, the mode of curing which was kept secret till after his death.

**CURING HAMs.**—The following is the mode practiced by W. Stickney, of Boston, which has been much admired. To every two quarts of a saturated solution of common salt, is added one ounce of summer savory, one of sweet marjorum, one of allspice, half an ounce of salt-petre, and one pound of brown sugar. The whole was boiled together, and applied boiling hot to the hams, which remained in the pickle three weeks.

## THE ORCHARD AND THE FRUIT GARDEN.

## DAVID THOMAS' ADDRESS.

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WE have been favored with a copy of the Address, delivered in September last, before the Aurora Horticultural Society, by DAVID THOMAS, its president. The author of this address, as is well known, has long stood among the first of practical, skillful, and scientific horticulturists in our country. His collection of bearing fruit trees, has, for many years, been one of the finest in the State. Hence he speaks from abundant practical knowledge, in the address before us, which is entirely confined to remarks on the culture of fruit. A few extracts cannot fail to prove interesting to our readers, though comprising but a small part of the valuable matter it contains:

"It was the custom in former times, whenever a finer fruit tree appeared in full bearing, for the neighbors to gather round,—some civilly asking for a share as *friends*, some taking it boldly as *robbers*, and some stealthily as *thieves*. May we congratulate ourselves on some improvement in our day?

"How many of the inhabitants of this blessed land of ours—under such glorious skies—raise any thing of the kind better than the old pie cherry, or the sour morello? than the horse plum or the little damson? How many feast, during the proper season, on apricots, the better class of peaches, and on the Seckel and vergalieu pears? There is not one in a hundred—probably not one in a thousand—who has a full supply of the finer fruits.

"In bringing about a better state of things, however, there are many difficulties to encounter. Trees cannot be had without some exertion; we may be cheated with spurious kinds, or they may die in transplanting; they may be infected by disease, or infested by insects; the fruit when young may be destroyed by frost, or when ripe, by plunderers; and under a view of all these discouragements, would it not be better and cheaper to buy our fruit? Here let us pause a moment, and ask, Of whom could we buy? If all the fine fruit of the country was divided amongst us, we should have so little, and that little so dear, (apricots three cents apiece at Rochester,) that we should only be tantalized, and never satisfied. No—to have plenty, we must raise it ourselves.

"The first step, then, is to select the best kinds; and on this point we cannot be too careful. Differences of climate, even on some hardy sorts, is very great; and three degrees of latitude may produce more than three degrees of flavor; so that the *excellent* somewhere else, may not be *excellent* here. As an instance: the Bezi de la Motte pear is very fine at Philadelphia, while with us, it is unsuited to human lips in four seasons out of five. Let me give another instance: From nearly twenty kinds of peaches—fine on the sands of New Jersey, whence I procured them—I shall not have more than three or four well suited to this district. But what a loss we sustain in trying such experiments! It is far better to get such *sorts* of high character as have been fully proved to be adapted to this particular climate, though the *trees* may be obtained from the south, east, or west."

"*Flavor, productiveness, and size*, are three points of the greatest importance in the character of fruit. At the head stands *flavor*—for without it fruit is worthless. Next stands *productiveness*—for if the tree is a poor bearer, it is of little value. *Size* is the third in importance; and still lower down in the scale is *beauty*, including *shape and color*. Many cultivators, however,

reverse this order, recommending large and showy sorts, chiefly because they *are* large and showy. The Monthly Reviewer once wittily said, 'I prefer a peach to a pumpkin;' and I conclude that a similar preference has prevailed when I see small varieties cultivated. This is finely illustrated by the Seckel pear—small, but very superior."

"In times past, it was difficult for an amateur in many cases to know what sorts he had in his garden—for nurserymen themselves often knew not what they were propagating. I have purchased bundles of trees, where not one-half of them proved true to their names. Indeed, it could scarcely be otherwise, from the course then pursued. A tree, perhaps, was procured from some distant nursery, and propagated to a great extent without waiting to see the fruit. If worthless, as it often happened, the amount of injury was very great, as scions were frequently carried hundreds of miles. I remember the first bundle that I obtained from a *great* nursery. So confident was I that all was right, and so eager to have such fine sorts widely scattered, that I invited my friends and neighbors to call and procure cuttings, little suspecting that a part were spurious, and a part suffering from a malignant disease. The cost, the care, and the labor, however, all went for nothing; and I felt, as hundreds of pomologists have felt in its true force, what the preacher meant by 'vexation of spirit.'

"Among the ways in which blunders of this kind occur, is that of trusting to careless assistants, instead of the proprietor's seeing to the business himself. To cut a graft from the wrong part of a tree, or to take up a young tree from the wrong row—is not very uncommon; and serious losses are often the result. Once I brought home with me from a distance of more than four hundred miles, a tree kindly presented to me as a treasure; but a servant was sent to take it up, and got one that was spurious. Somehow—perhaps in this way—the late President Knight scattered an inferior variety, in place of his famous Monarch pear; and he estimated the vexation and damage at more than ten thousand pounds sterling."

## REMARKS ON BUDDING.

.....

In the October number of the Cultivator, for 1846, a correspondent at Prospect, Conn., gives us some account of his experiments in budding, the past summer. As I have in former years, repeatedly tried all the experiments there detailed, it may perhaps be interesting and useful to give the results.

With regard to the *time* of budding, the remarks in that communication are mainly correct. I have never found any advantage in deferring budding after the end of the summer months, though peaches and sometimes apples, may be budded very early in September, provided the season is warm and moist, so as to continue the rapid growth of the stocks; for as soon as stocks cease to grow, the operator may as well hang up his fiddle at once. In some seasons, I have known the majority of buds to fail, when inserted as late as the middle of August; in others, I have had good success as late as the middle of September. What was the reason? In the former case, the stocks were not thrifty, and their growth had been almost wholly arrested by drouth. In the other, the soil was rich, the trees vigorous, and the season warm and wet, so as to keep up the growth in vigorous state. It however rarely happens that any budding is



better when done so late, and very rarely so good.—Plums usually pass the most rapid season of growth in July; hence they *must* be budded early; cherries *often* pass that period early, but not invariably; hence the practice must correspond. Peaches may be usually budded considerably later; because being the native of a warmer climate, their growth continues longer, and is more rapid than that of most other fruit trees.

But as a general rule, caution is needed, in budding too early. Unless the buds are well matured, they will be likely to fail. Apple buds, early in July, inserted in very thrifty stocks nearly all failed—they had not become sufficiently matured,—the young wood from which they were taken was soft, and soon shrivelled. In one season, cherry buds, set the middle of July, nearly all lived and grew; in another, set at the same time, they nearly all failed from a want of maturity, while those set two weeks later did finely. It very rarely happens that peach buds are sufficiently matured before the early part of August.

With regard to starting the growth of buds the same year they are inserted, I have never found any advantage from it, and often considerable loss. I started peach and apricot buds, by keeping down the stock, and in some cases they grew more than a foot. But they never matured the wood; and in every case without exception, they were wholly destroyed by the winter. The shoots themselves were not only destroyed, but the poisoned or fermented sap resulting from their death, ran down to the roots of the stock; and the whole tree perished. Pears and apples were not thus destroyed; but I have repeatedly found that the small growth they made had an effect to stunt them, and by the end of the second year, they were no larger than those of one year's growth from the bud in spring, and not so straight and thrifty. Perhaps others may be more successful; I merely state these as the results of numerous experiments.

I ought to have stated one fact, derived from considerable experience, that in setting buds quite early, before the wood has fully hardened, a great benefit results from cutting off plenty of wood from the shoot, with the bud:—the practice of English writers on this point, of removing the small piece of wood, being highly detrimental.

V. W.

Western New-York, Nov. 1846.

#### RAISING YOUNG QUINCE TREES.

.....  
An intelligent cultivator of fruit has very successfully adopted the following practice for raising quince trees in the nursery. Instead of planting the cuttings of the desired variety into the soil, as by the usual method, he inserts each cutting as a graft into an apple root, precisely as in common root-grafting. The cuttings commence growing rapidly at once, deriving as they do a full supply of nourishment from the root of the apple; and afterwards throwing out roots of their own, as they always do very freely, the apple root separates and dies, while the quince continues to flourish on its own roots. This is found to afford very handsome and thrifty young trees, and with much greater certainty than if raised simply by cuttings in the soil.

The same cultivator picked the past season *two barrels* of quinces from a single tree. This tree is eighteen years old, and one foot in diameter near the ground. As with all the other trees in the orchard, the soil around it has been kept rich and constantly cultivated. T.

CORN OIL.—It was stated at the New-York Farmers' Club, last winter, that a light-house on Lake Erie had used oil made from corn, for burning; and that about sixteen gallons of oil had been obtained from a hundred bushels of corn.

#### GRAFTING GRAPE VINES.

.....  
In the Cultivator for the present month I perceive a notice of "a correspondent of the Ohio Cultivator," who has succeeded in grafting foreign grape vines upon newly transplanted Isabella vines. It strikes me as a very remarkable coincidence that the person alluded to should not only have grafted the same number of vines in precisely the same way that I did, but should have described the operation in the very words which I made use of in a letter to you, which was published on page 237 of the last volume of your paper.

Is not such a 'freak of nature' worthy of observation?

H. W. S. C.

Outlands, Burlington, N. J., Jan. 4, 1847.

CRANBERRIES.—JAMES N. LOVELL gives the Barnstable Co. (Mass.) Agricultural Society a statement of his mode of cultivating cranberries. He says that in 1834 he set out cranberry-vines on what had been a cedar-swamp, covered over with beach sand. They have done well, and the average yield the past season was a bushel and a half to the square rod—or at the rate of 240 bushels per acre. He kept the lot flooded with water till about the 15th of April each year. For gathering, he gives from one-fourth to one-sixth, according to the abundance of the fruit. He gets two dollars per bushel, the mode of measuring being to give nine half pecks, struck measure, for one bushel. He speaks of a worm which has sometimes attacked his vines, and to destroy which he recommends sowing on them salt or ashes, about the middle of July, while wet with dew, at the rate of a bushel to forty rods, or four bushels to the acre.

#### THE POTATO NOT A NATIVE OF VIRGINIA.

.....  
SOME years ago, I had an opportunity to read Gerard's Herbal, (edition of 1633,) and was aware of his assertion, before I saw the extract relative to the potato, in the last Cultivator, that he had "received roots hereof from Virginia." Probably he *believed* so; but very improbable that he *did* so. He has neither named the person from whom, nor the year in which, he received them,—things scarcely to be omitted, if they had been brought to him *directly* from that country.

At a time when newspapers were not published to correct the idle rumors of the day, it is not surprising that the native country of the potato, should be mistaken; and however eminent Gerard was as a herbalist, his ignorance in some other matters, was very remarkable. In his account of the African Marigold, (*Tagetes erecta*),—well known to have come originally from Mexico,—he says, "They grow everywhere almost in Africke of themselves, from whence we first had them, and that was when Charles the fifth, *Emperor of Rome*[!] made a famous conquest of Tunis."

The author of the article on the Potato in the Library of Entertaining Knowledge, evidently mistook "the Wild Potato," (*Apios tuberosa*), for the common potato, (*Solanum tuberosum*.) This would not have been the case, if Heriot had also described the common potato; and his not doing so, proves conclusively to me that the early settlers never found it there. Neither have any of our botanists.

DAVID THOMAS.

Greatfield, 12 mo. 20, 1846.

RICE AT ROME.—The attempts made the past season to cultivate rice at Rome, have fully succeeded, and a company has been formed for growing rice on the extensive flats of that country. An attempt is also about to be made to introduce its culture on the Delta of the Rhone, where there are about 50,000 acres capable of being flooded and turned into rice fields.

THE AMOUNT OF TEA consumed by the people of the United States is 18,000,000 pounds annually.

## FARMERS' CLUBS.

THERE is nothing like discussion to bring out the various points of a subject, and present each in its true light; hence we do not know of a better means of eliciting facts in relation to the business of farming, and thus advancing the interests of those engaged in it, than the formation of neighborhood associations or "Farmers' Clubs." These associations have become very common in England, and have been formed to some extent in this country, and wherever known, their great usefulness is admitted. Under proper regulations, they constitute at once the means of acquiring useful knowledge, and of social enjoyment.

The form or plan of association, may be very simple.

The farmers of a certain township or district agree to meet once a week, or once in two weeks, during the winter season, at each others' houses, in rotation, for the discussion of questions relating to rural management. Perhaps the following might answer:

ARTICLE I. The subscribers agree to form an Association under the name of ——— Farmers' Club, the object of which is to improve ourselves in knowledge relating to Agriculture, Horticulture, and Husbandry generally.

ART. II. The officers of the Association shall be a President, whose duty it shall be to preside at the meetings, and a Secretary who shall keep such records and minutes as the Association shall direct.

ART. III. The officers shall be elected by ballot, and shall hold their places till others are chosen in their stead.

ART. IV. During the months of ———, the Association shall meet at such times as may be agreed on by a majority of the members, for the discussion of questions. The meetings shall be held in rotation, at the houses of the respective members; commencing and proceeding in alphabetical order.

ART. V. Questions shall be offered in writing, and such shall be chosen for discussion, as the Association may agree on by vote, at any regular meeting.

ART. VI. This constitution is subject to amendment or alteration as a majority of all the members shall direct.

The following might form some of the questions for discussion. *In all cases it should be understood that questions have particular reference to the district where the association is located.*

What course of farming is most profitable for the different soils of the district?

What is the best mode of cultivating Indian corn? The same question as applicable to other crops grown in the district.

What is the best mode of managing and applying barn-yard or animal manures? What are the best means of increasing the supply of manures? The best modes of using peat or "muck?" Whether by mixing with animal manures, urine, ashes, lime, or any other substances? and the effects on various crops as compared with common animal manures?

These are but few of the questions which might be discussed with advantage. Others will of course be suggested. They may be offered at any time, and the secretary should keep a list of them, which may be read before the association whenever called for.

It is the practice in England, and we think it might be well adopted here, to pass a resolution at the close of each discussion, expressive of the views of the subject which has been under consideration. This gives

the discussions a weight and character which entitles them to notice. For instance, suppose the question to have been—"What is the best mode of rearing and fattening swine?" the following might be adopted:

*Resolved*, That in this district the most profitable mode of rearing swine and making pork, is to feed the pigs freely from the first with dairy-slops, (that is, skimmed milk or whey,) if it can be had on the farm, giving them a run on clover or grass through the summer, and in the fall fatten them in clean warm pens, with a mixed food of potatoes, apples, or pumpkins, with meal of Indian corn, barley, or peas and oats, *cooked*—the pigs to be slaughtered when from eight to ten months old.

The discussions and decisions of associations formed on this plan, would form the most interesting matter for agricultural periodicals; and we shall be pleased to receive reports of clubs for insertion in our columns. Confident of the utility of such organizations, we trust no time will be lost in getting them up, in all parts of the country. Now is the time—while out-door operations are principally suspended, to prepare for action—for that action which shall be most effective. Improve the present season in the acquirement of *knowledge*; and under all the lights and advantages which that confers, be ready to commence business at the right time and in the right way.

## BEES, BEE-HIVES, AND BEE-MOTHS.

Mr. FRANCIS CLARKE, of Ypsilanti, Michigan, sends us the following description of a bee-hive which he has constructed:—

"I place two hives side by side, both precisely alike; dimensions, say, front 22 inches, back 19 inches in height, by 6 $\frac{3}{4}$  inches in width inside, with a chamber 6 inches wide for a drawer; this leaves the main part of the hive 15 inches front, 12 inches back. The two hives communicate with each other by a hole 3 inches in diameter, 6 inches below the under side of the chamber floor; both are set together upon a floor-board inclining 3 inches from front to back; the floor-board has a 4 inch square wire screen under each hive, with a groove 3 inches long by three-eighths in., for the admission of the bees. The hives are connected together by hooks and staples, and the top covers the whole. The object you will see is to separate the hives at a proper time, and place an empty one by the side of each full one, saving the necessity of watching them for natural swarms."

Mr. CLARKE informs us that when he commenced keeping bees, in the spring of 1846, he was told that the bee-moth had never been known in that region; but he found them very plenty and troublesome. Mr. C. mentions that it has been asserted by Mr. WEEKS in a communication to the Cultivator, in 1843, that the egg of the moth will not hatch where white-wash is used; and Mr. C. wishes to know whether Mr. W.'s experience since 1843 to this time, proves the efficaciousness of white-wash in this respect. Mr. C. is desirous of knowing the best plan of preventing the ravages of the bee-moth, and we should be obliged if our correspondents will furnish suggestions on this point. As to the best plan for an Apiary, for which Mr. C. inquires, we have seen nothing which we think equal to the plan mentioned in our last volume, page 305, and also alluded to in our last number.



## AGRICULTURAL SOCIETIES.

## NEW-YORK STATE AG. SOCIETY.

THE annual meeting of the New-York State Ag. Society was held at the Assembly Chamber of the Capitol, on the 20th and 21st days of last month—the President, J. M. SHERWOOD, Esq., in the chair, LUTHER TUCKER, Secretary.

After the arrangement and call of the roll, the applications for premiums were distributed to the various committees.

On motion of L. F. ALLEN, Esq., of Erie, a resolution was adopted, that a committee of three be appointed from each Senate District, to nominate officers of the Society for the ensuing year, and also to recommend the place for holding the next Fair of the Society—the delegates present from each District to appoint the committee for their District. A recess was then taken, to enable them to fulfil this duty. On their return to the room, the following gentlemen were announced as the committee on nominations, &c. 1st District.—Messrs. S. S. Benedict, J. S. Titus, and Wilson Small.

2. Messrs. Lewis D. Berrien, Wessill S. Smith, and James E. Beers.

3. Messrs. J. J. Viele, J. P. Beekman, and A. Van Bergen.

4. Messrs. Orville Clark, Thos. H. Marvin, and Abijah Beckwith.

5. Messrs. Benj. Enos, John Dean, and A. P. Grant.

6. Messrs. Charles Cook, J. S. Wadsworth, and E. Mack.

7. Messrs. G. V. Sackett, J. T. Rathbone, and J. M. Ellis.

8. Messrs. Wm. Buel, G. Hard, and J. T. Bush.

On motion of BENJ. ENOS, Esq., of Madison,

*Resolved*, That a committee be appointed to memorialize the Legislature to renew the law extending aid to the State and County Agricultural Societies, which expire with the old Constitution. [Committee, Messrs. Enos, Johnson, and Tucker.]

On motion of Mr. ALLEN, amended by Mr. GEDDES, the Constitution of the Society was so amended as to make all Ex-Presidents permanent members of the Executive Committee.—agreeably to notice given at the last annual meeting, by Maj. Kirby.

Mr. L. F. ALLEN offered the following amendment to the Constitution, to be acted upon at the next annual meeting:

The second section of the Constitution of this Society, shall be so amended as to locate the several Vice-Presidents thereof, one in each Supreme Judicial District of the state, as may be organized by the Legislature, instead of the Senate districts, as heretofore; they being abolished by the new Constitution of the State.

The following resolutions, introduced by Mr. J. S. WADSWORTH, of Livingston, were passed, after an extended discussion, in which Messrs. Wadsworth, Geddes, Johnson, Viele, Allen, Marks, Beckwith, Peters, Bloss, and others, took part:

*Resolved*, That in the opinion of this Society, any restriction upon the transmission to market, of the products of the soil and industry of the country, are alike injurious to the interests of the producer and consumer, and when not required by the exigencies of the public service, are an invasion of the rights of the citizen.

*Resolved*, That this Society regard the prohibition in the charters of the several railroads parallel to the Erie canal, against the use of said roads for the transmission of freight during the continuance of canal navigation, even though the same tolls are paid thereupon as are exacted upon the canal for the same distances, as an unnecessary, and therefore, an unwise interference with the industry of the state.

*Resolved*, That the Executive Committee of this Society, be directed to prepare and lay before the Legislature, a memorial, praying that honorable body to authorize these railroads to carry freight at all seasons of the year, subject to the same tolls as are paid upon the Erie canal.

Gen. VIELE, of Rensselaer, submitted the following resolutions for future consideration, which, on motion, were referred to the evening session:

*Resolved*, That, in the opinion of this Society, the profession of practical agriculture cannot fail to be vastly improved by a general diffusion of scientific knowledge applicable thereto.

*Resolved*, That by uniting scientific knowledge with practical skill, the profession of agriculture will obtain the elevated station that belongs to it, and we regard it as a sure method of improving the moral condition of the people; and that we believe that the time has arrived which demands that this subject should receive more attention than has hitherto been given to it.

Mr. MINTYRE, the Treasurer, read his report, showing the following receipts and expenditures for the past year:

## RECEIPTS.

Balance per last report.....	\$546.21
Memberships at annual meeting.....	137.00
Wm. Buel, life membership.....	50.00
Memberships at various times.....	10.00
Dividend on Mohawk bonds.....	105.00
Interest on Bond and Mortgage.....	70.00
Receipts at Auburn Show.....	4,333.17
Jos. Fellows, for Pulteney estate.....	50.00
State payment.....	700.00
Interest on Mohawk bonds.....	105.00
Transactions sold.....	5.00
Interest on Bond and Mortgage.....	70.00
	<b>\$6,191.38</b>

## PAYMENTS.

Premiums paid.....	\$1,599.43
Expenses at Auburn.....	710.82
Salaries paid.....	706.00
Sundry expenses.....	630.71
Invested in Bond and Mortgage.....	2,000.00
Balance in hand.....	534.42
	<b>\$6,191.38</b>

## Evening Session.

On the report of Judge SACKETT, chairman of the committee on nominations, the following gentlemen were elected officers of the Society for the ensuing year:

President—GEORGE VAIL, of Troy.

## Vice-Presidents.

1st District—WM. T. McCOWN, New-York.

2d " JOHN A. KING, Jamaica.

3d " C. N. BEMENT, Albany.

4th " SAMUEL CHEREVER, Stillwater.

5th " O. C. CHAMBERLAIN, Richfield Springs.

6th " ELI C. FROST, Catherine.

7th " H. S. RANDALL, Cortlandville.

8th " WM. BUELL, Rochester.

Recording Secretary—LUTHER TUCKER, Albany.

Corresponding Secretary—JOEL B. NOTT, Albany.

Treasurer—J. McD. MCINTYRE, Albany.

Executive Committee—WILLIAM A. BEACH, Saratoga Springs, JOSHUA T. BLANCHARD, Saratoga Springs, LUTHER BRADISH, New-York, G. V. SACKETT, Seneca Falls, THOS. J. MARVIN, Saratoga Springs.

The committee reported E. P. PRENTICE as Vice-President for the 3d District, but on his declining, the name of Mr. BEMENT was substituted.

The committee also recommended SARATOGA SPRINGS, as the place for holding the next State Fair.

Mr. L. F. ALLEN, chairman of the committee appointed last year to report a selection of Fruits, best adapted to the different portions of the state, said that they were prepared to report only in part. They recommended a list of apples best adapted to home use and exportation. This list he would present, and ask that the committee might be continued.

Mr. A. said that it was admitted that the climate of this state was well adapted to the cultivation of apples, pears, peaches, &c., and he did not doubt that within a year, the subject of fruits had become to be better understood than ever before, and more had been learned in five years than had been learned previously from the day of the landing of the Pilgrims.

The study was deeply interesting. The whole people seem to have taken hold of it. The result is that immense quantities of excellent fruit are now annually exported; and there are some farmers on the North river who make more from their orchards than from their whole farms beside.

Mr. A. read the following list of apples, which he highly recommended:—

Early.—Early Harvest, Early Bough, Strawberry, Williams' Favorite, Early Joe.

Autumn.—Fall Pippin, Golden Sweet, Gravenstein, Jersey Sweeting, Rambo, Detroit.

Winter.—Baldwin, Yellow Bell-flower, Hubbardston Nonsuch, Newtown Pippin, Northern Spy, Blue Pearmain, Rhode Island Greening, American Golden Russet, Roxbury Russet, Swaar, Ladies' Sweeting, Talman Sweeting, Esopus Spitzenburgh, Vandevere, Waxen Apple.

Mr. MARKS, of Greene, gave the following notice:

Notice is hereby given that a resolution will be offered at the next annual meeting of this society, for the alteration of the Constitution so that the election of its officers by ballot may be dispensed with by a vote of two-thirds of the members of said society present.

Thursday, Jan. 21.

The Society convened in its room in the old State Hall, at 10 o'clock A. M., when the reports of the several Committees on the award of Premiums, were read.

Mr. ENOS, of Madison, from the committee to memorialize the Legislature for a renewal of the law in aid of Agricultural Societies, reported a memorial which was adopted, and directed to be presented to the Legislature.

On motion of Mr. ALLEN, of Erie.

*Resolved*, That \$50 be appropriated, under the discretion of B. P. JOHNSON, Esq. Chairman of the Cheese Committee, for the purpose of obtaining the documents appertaining to the sixty cheese dairies of Herkimer County, as exhibited at the State Cattle Show in Utica, in 1845.

On motion of Mr. WADSWORTH, of Livingston.

*Resolved*, That the Executive Committee be directed to offer premiums for the present year, to the amount of \$2,500, exclusive of books belonging to the Society.

2. That \$1,500 be appropriated for the expenses of the Society for the year 1847, other than for premiums, and that the authority of the Treasurer to make payments from the treasury, upon the order of the Executive Committee, be limited to that amount.

Mr. ALLEN of Erie, gave

Notice that a resolution will be offered at the next annual meeting of the Society, so to amend the constitution, that a nominating committee of one from each Senatorial District of the state, shall be selected from the members of the Society present from each Senatorial District, who shall report the names of proper persons for the officers of the society for the ensuing year; and that no person shall be elected to any office of the society who is not a member thereof.

#### Evening Session, Jan. 21.

The Secretary read the list of premiums awarded on the reports of the several awarding committees, as follows:

**On Cheese, Dairies and their management**—Newbury Brown, Warsaw, Wyoming County, 1st Premium, \$50.00—400 lbs. to each cow, in a dairy of 40 cows.

Mr. and Mrs. Wm. Outley, Phelps, Ontario County, 2d Premium, \$30.00—at the rate of 400 lbs. per cow, in a dairy of 8 cows.

**On Butter Dairies**—B. H. Hall, New Lebanon, Columbia Co., 1st Premium, \$25.00.

**Indian Corn**—Charles W. Eells, Kirkland, Oneida Co., 1st Premium, \$15.00. 123 1-2 bushels per acre, at 56 lbs. to the bushel.

Benj. Enos, DeRuyter, Madison Co., 2d Premium, \$10.00.—111 bu. 52 lbs. per acre.

Robert Eells, Westmoreland, Oneida Co., Vol. Transactions.—103 3-4 bu. per acre.

**Peas**—Amos Miller, Vernon, Oneida Co. 2d Premium, \$10.00.—47 bushels per acre.

**On Farms**—Sets of Society's Transactions were awarded to James Callanan, New Scotland, Albany Co., and to James Van Sieten, Jamaica, Long Island.

**Prize Essays**—Extirpation of Canada Thistles, Ambrose Stevens, New York, \$10.00. Sereno E. Todd, Lake Ridge, Tompkins Co., set Transactions.

**Experiments on Indian Corn**—J. F. Osborn, Port Byron, Cayuga Co., \$20.00.

**Carrots**—Wm. Wright, Vernon, Oneida Co., 1st Premium, \$10; 969 bush. on 1 27-100 of an acre, at an expense of \$25.76.

Wm. Risley, Fredonia, Chautauque Co., 2d Premium, \$5.00.—1590 1-2 bush. on 1 3-8 of an acre, at an expense of \$109.25.

**Sugar Beets**—J. F. Osborn, Port Byron, Cayuga Co., 3d Premium, Vol. Transactions—774 bush. on 1 acre 15 rods.

**Designs for Farm Dwellings**—Mrs. J. M. Ellis, Onondaga Hill, Onondaga Co., Premium \$15.00.

**Barley**—Alvin Pomeroy, East Bloomfield, Ontario Co., 1st Premium, \$10.00—48 1-4 bush. per acre on the whole crop.

Samuel H. Church, Vernon Centre, Oneida Co., 2d Premium, \$5.00—44 1-4 bush. per acre.

E. C. Bliss, Westfield, Chautauque Co., 3d Premium, Vol. Transactions—38 12-32 bush. per acre.

**Spring Wheat**—Robert Eells, Westmoreland, Oneida Co., 2d Premium, \$10.00—20, 42, 60 bu. per acre.

**Oats**—Nathaniel S. Wright, Vernon Centre, Oneida Co. 1st Premium, \$10.00—75 1-4 bush. per acre for 13 acres.

Robert Eells, Westmoreland, Oneida Co., 2d Premium, \$5.00—77 bush. per acre for 1 acre 37 rods.

**Timothy Seed**—E. C. Bliss, Westfield, Chautauque Co., 1st Premium, \$10.00.

**Culture Flax**—E. C. Bliss, Westfield, Chautauque Co., 1st Premium, \$5.00—best 1-2 acre

The President of the Society, J. M. SHERWOOD, Esq., then delivered the annual Address, upon the conclusion of which, On motion of Mr. WADSWORTH,

**Resolved**, That the thanks of the Society be tendered to the President, J. M. Sherwood, Esq., for his valuable services to the Society during the past year, and for his appropriate and interesting Address, and that he be requested to furnish a copy of his Address for publication in the Transactions of the Society.

Gen. CHANDLER, of New-York, called up the resolutions introduced yesterday by Gen. VIELE, on the subject of Agricultural Education, which after a very interesting and prolonged discussion, in which the mover, Gen. Chandler, Senators Clark and Beckman, Messrs. Allen, Marks, Johnson, Cheever and Wadsworth took part, were unanimously adopted.

The President then stated that he was requested by the President elect to call a meeting of the new Executive Committee at the Society's room, at 11 o'clock to-morrow, after which the Society adjourned sine die.

#### Friday, Jan. 22d.

The Executive Committee met at the Society's Rooms.

**PRESENT**—George Vail, President; Samuel Cheever, Caleb N. Bement, and William Buel, Vice-Presidents; J. S. Wadsworth, A. Van Bergen, J. M. Sherwood, and B. P. Johnson, Ex-Presidents; Joel B. Nott, Corresponding Secretary; Luther Tucker, Recording Secretary; J. McD. McIntyre, Treasurer; J. T. Blanchard, T. J. Marvin, and W. A. Beach, Executive Committee.

Twenty-five copies of the "American Shepherd" were received from Mr. MORRELL and the Messrs. HARPERS, of New-York; and a resolution of thanks was passed, to be communicated to the donors.

Messrs. PRENTICE, TUCKER, and BEMENT, were appointed a committee to report on the Premium List at the next meeting.

Mr. TUCKER tendered his resignation as Recording Secretary.

On motion of J. S. WADSWORTH,

**Resolved**, That Mr. TUCKER's resignation be accepted, and that the thanks of the Society be most cordially tendered to him for his long and valuable services as Recording Secretary of the Society.

B. P. JOHNSON, of Oneida, (on motion of J. S. WADSWORTH,) was appointed Recording Secretary, in the place of Mr. TUCKER, resigned.

It was **Resolved**, That weekly meetings of the friends of agriculture, for the discussion of agricultural subjects, be held at the Capitol, during the session of the Legislature; and that Mr. How-

ARD, Mr. MCINTYRE, and Mr. BEMENT, be a committee to make preparations for the meetings.

The Recording Secretary was directed to employ a competent Reporter for these meetings.

A communication was received from D. B. STOCKHOLM, Esq., of Ithaca, on the preparation of a manure called, "Chemical Guano," which was referred to Messrs. JOHNSON and BEMENT.

#### AFTERNOON SESSION.

The President presented a communication he had received from Hon. LUTHER BRADISH, of New York, declining, on account of his private engagements and the state of his health, his appointment as a member of the Executive Committee.

On motion of Mr. BUEL, of Monroe, Mr. AMERSON STEVENS, of New York, was appointed a member in the place of Mr. BRADISH.

### NEW-YORK COUNTY SOCIETIES.

**ONEIDA**.—At the annual meeting held at Verona, Jan. 7, 1847, the following premiums were awarded:

**Indian Corn**.—1. To Charles W. Eells, Kirkland, 123 bu. 27 lbs. per acre; profit \$37.74. 2. To Geo. R. Eells, Westmoreland, 103 bu. 44 lbs.; profit \$28.39.—3. To Robert Waterman, do., 90 bu. 10 lbs.; profit, \$27.53.

**Spring Wheat**.—1. To Robert Eells, 20 bu. 42 lbs.; profit, \$13.10. 2. To Robt. Waterman, 21 bu. 45 lbs.; profit, \$19.52.

**Barley**.—1. To S. H. Church, Vernon, 56 bu.; profit, \$42.89.—2. To Wm. E. Burritt, Marshal, 48 bu. 36 lbs.; profit, \$16.80.

**Oats**.—1. To Wm. C. Burritt, 102 bu. 19 lbs. per acre, profit, \$20.35.—2. To S. H. Church, 57 bu. 3 lbs.; profit, \$13.58.—3. To Robert Eells, 57 bu. 27 lbs.; profit, \$5.23.—Extra premium to N. S. Wright, Vernon, 79½ bu.; profit, \$16.57.

**Peas**.—1. To Amos Miller, Vernon, 55 bu. 12 lbs.; profit, \$21.—2. To Edward Rivenburgh, Vernon, 36 bu. 51 lbs.; profit, \$18.84.

**Potatoes**—half an acre—quantity and quality considered.—The crop was so light that the 2d premium only was awarded, to Wm. C. Burritt, 74 bu. 9 lbs.; profit \$16.07.—The 2d premium, quantity alone considered, to S. H. Church, 115 bu. 27 lbs.; \$19.60.

**Ruta-Bagas**—quarter acre.—1. To Plyment Mattoon, Vienna, 159 bu. 17 lbs.; profit, \$27.38.

**Carrots**—quarter acre.—1. To Wm. Wright, Vernon, 250 bu. 10 lbs.; profit, \$23.43.

After the awarding of premiums, the following gentlemen were unanimously elected officers of the society for the ensuing year:—

**President**, Edward S. Salisbury, of Ellsburgh; **Vice-Presidents**, James Brintnall, of Watertown Jonathan Webb, of Brownville, David Granger, of Champion, Curtis Goulding, of Pamela, Hart Massey, of Watertown, Oliver Grow, of Houndsfield, Dan'l Eames, of Rutland, Miles Cooper, of Adams, John N. Rotier, of Orleans, A. R. Calvin, of Clayton; O. V. Brainard, **Treasurer**; John C. Sterling, **Cor. Secretary**; E. S. Massey, **Rec. Secretary**; **Executive Committee**, Willard Ives, Moses Eames, John Winslow, Phineas Hardy, Abner Baker, Hart Massey, Jr., A. P. Brayton.

**JEFFERSON**.—The annual meeting was held on the 24th Dec., when the following officers were elected:—

**President**, Edward S. Salisbury, of Ellsburgh; **Vice-Presidents**, James Brintnall, of Watertown Jonathan Webb, of Brownville, David Granger, of Champion, Curtis Goulding, of Pamela, Hart Massey, of Watertown, Oliver Grow, of Houndsfield, Dan'l Eames, of Rutland, Miles Cooper, of Adams, John N. Rotier, of Orleans, A. R. Calvin, of Clayton; O. V. Brainard, **Treasurer**; John C. Sterling, **Cor. Secretary**; E. S. Massey, **Rec. Secretary**; **Executive Committee**, Willard Ives, Moses Eames, John Winslow, Phineas Hardy, Abner Baker, Hart Massey, Jr., A. P. Brayton.

The Committee on Field Crops made the following report and award of premiums:

To John B. Ball, best acre of winter wheat, 35 bushels, \$4.00; Hart Massey, Jr., 2d best, 30 bushels, average on five acres, \$3.00.

E. D. Allen, best acre of Spring wheat, 25½ bu., \$4.00. Hart Massey, 2d best, 23 bu., \$3.00.

Hart Massey, best acre of barley, 56 bu., \$3; E. S. Salisbury, 2d best, 55½ bu., average on 5 acres, \$2. E. D. Allen, 3d best, 42½ bu., Vol. Trans.

Curtis Goulding, best acre of oats, 67½ bu., \$3; Hart Massey, 2d best, 65 bu., \$2.

Aaron Shew, best acre of peas, 39½ bu., \$3; Jerome Ives, 2d best, 40½ bu., \$2.

Samuel Felt, best half-acre of potatoes, 390 bu. per acre, \$3; Phineas Hardy, 2d best, 428 bu. per acre, \$2.

Nelson Clark, best ¼ acre of broom corn, with sample of 12 brooms, \$3; A. P. Lewis, 2d best, \$2.

Hart Massey, Jr., best ¼ acre of white beans, 28 bushels per acre, \$3.

Moses Eames, best ¼ acre of carrots, 956 bushels per acre, \$3; Hiram Converse, 2d best, 600 bu. per acre, \$2.

**QUEENS**.—Extract of a letter to the Cultivator:—"I intended to have given you an account of our Agricultural Exhibition, which was at Flushing, on the 9th of October, and passed off with much eclat. It was attended by several thousands of persons; many from remote parts of the state, and indeed, from other states, and was spoken of by some as superior in many respects to any exhibition of the State Society, and as far surpassing any other county exhibition. Our society has become a pet with our people, and has been the means of infusing a new and vigorous spirit in our farmers, and with the most happy results. The annual meeting of this society was held on the 19th of December, and officers elected for the ensuing year. Hon. Wm. T. McCoun, **President**; and Albert G. Carl, **Cor. Secretary**. All communications intended for the society, may be addressed to the latter, at Jericho P. O."



## MONTHLY NOTICES—TO CORRESPONDENTS, &amp;c.

COMMUNICATIONS have been received during the past month, from David Thomas, X., Pennepack, Tiller, H., Zea, A. B. Price, Ralph R. Phelps, M. Hayward, J. H. King, Caius, N. S., P. Lewis, Daniel S. Curtis, G. Butler, H. of Oneida, J. Pettit, Samuel S. Hayden, T. H. Austin, H. W. S. C., Z. C. Robbins, Evelyn, John Moxon, E. Phinney, John Wilkinson, A. Subscriber, Norfolk, H. A. P., Wm. Little, H. A. Parsons, H. W. Lester, Geo. K. Pardee, J. R. Todd, S. S. R., H. L. R. Sandford, B., S. W. Jewett, W. Bacon, J. Townsend.

BOOKS, PAMPHLETS, &c., have been received as follows:—Transactions of the Essex (Mass.) Ag. Society, for 1846—a handsome pamphlet of 100 pages, from J. W. PROCTOR, Esq.—Address upon Education and Common Schools. By JAMES HENRY, Jr. With an Appendix, embracing the views of Col. Young, Gov. Clinton, and others. From the Author.—Transactions of the Worcester (Mass.) Ag. Society for 1846, embracing the annual address, Reports of Committees, &c.—The American Journal of Science and Arts, for Jan.—An Address delivered before the Aurora Horticultural Society, by DAVID THOMAS, President, on the 1st Sept., 1846.—American Journal of Insanity, for January, edited by the officers of the N. Y. State Lunatic Asylum, and published at Utica, by Bennett, Backus & Hawley; 96 pages, quarterly, at \$1 a year.—The Farmers' Agricultural Chemistry, compiled from the best authors, by M. M. RODGERS, M. D. Published at Geneva, by G. H. Derby, & Co.—Address before the Hartford Co. Ag. Society, by Rev. Horace Bushnell. From S. W. BARTLETT, Esq.

AG. SOCIETIES AND THE CULTIVATOR.—We have, within the last month, received the following subscriptions to the Cultivator. From the

Chittenden Co. (Vt.) Ag. Society,.....	200 copies.
Rhode Island Ag. Society,.....	154 "
Dutchess Co. Ag. Society,.....	102 "
Caledonia Co. (Vt.) Ag. Society,.....	72 "
Cortland Co. Ag. Society,.....	21 "
Saratoga Co. Ag. Society,.....	20 "
Smith's Falls (C. W.) Ag. Society,.....	20 "
Queens Co. Ag. Society,.....	11 "

PRICE OF THE CULTIVATOR.—We have had several inquiries as to whether we could furnish the Cultivator to Agricultural Societies at fifty cents a year. To save farther inquiries on the subject, we here state that the Cultivator cannot be had at that price by Ag. Societies or by any one else. In order to induce as general a subscription to the Cultivator as possible, we fixed the terms as low as it could possibly be afforded; and to enable every farmer to avail himself of the lowest rate, we put it to clubs of 15 as low as we sell it to Agents who take from 100 to 800 copies. Could we afford the paper at a less rate, we should reduce the price alike to all. We think the Cultivator, at the club price of 15 copies of \$10, the cheapest publication in the country, considering the size of the sheet, its illustrations, &c., and it could not be afforded at that price, but for the extensive circulation which it receives.

SPRING WHEAT.—J. B., (Nansemond County, Va.) We should think it might be an object to try spring wheat on the soil you mention. As to the best variety, we believe the Black-Sea has generally succeeded best in this section. It can be had at the Albany Ag. Warehouse, at \$1.50 per bushel.

PLAN OF A BARN.—"A Subscriber," (Baltimore, Md.) For a general outline, we would refer you to several barns which are spoken of in this number, under

the head of "Sketches of Massachusetts Farming." We are in hopes, however, to give the details of a plan shortly.

PLOWING IN ORCHARDS. "A Subscriber."—It is best to use oxen in plowing orchards, wherever practicable, because they can be made to work so much closer to the trees than horses, without doing harm. But if horses must be used, the whiffletree should be as short as practicable, and we have seen the outside trace chains and the ends of the whiffletrees covered with pieces of old carpet or bagging, to prevent them barking the trees.

SEEDLING APPLES.—We are indebted to Mr. J. C. HASTINGS, of Clinton, N. Y., for some specimens of a seedling apple raised by JOHN KIRKLAND, Esq., of that place. In shape, size, and color, this apple resembles the Yellow Belle-flower. It is stated that it will keep till June, and Mr. Hastings observes—"for an apple that keeps so long, I am acquainted with but few that are superior to it." We are informed that the samples sent, have been kept since fall in a room adjoining one where there has constantly been a fire, and that they are on this account prematurely ripe. It may be owing to this circumstance, also, that the fruit has less flavor than is possessed by apples of the highest character. We think it, however, a good apple, and worthy of being known and cultivated. Mr. HASTINGS suggests that there should be a committee appointed by the State Society, to reside in this city, for the purpose of examining and reporting on seedling and rare fruits.

BENSON'S HYDRAULIC RAM.—M. HAYWOOD, Rutland, Vt., wishes to know whether this machine can be made to bring water to his barns from a spring forty-five rods distant, and from seventy-five to a hundred feet lower—there being plenty of water and a fall, if needed. We will thank Mr. BACON, of Richmond, Mass., or any other correspondent, if they will furnish this information, stating at the same time, where and on what terms the machine can be obtained.

SOWING PLASTER, "year after year on the same land, without any other manure, is not considered an advisable course, in general, though we have known one or two instances where it had been followed on grass many years, and with no diminution in the crop. But in these cases there was probably some remarkable though unknown quality in the soil, which rendered the plaster unusually effective. But we believe it to be acknowledged that the most favorable operation of plaster is when it is applied in connection with animal or organic manures.

"MAMMOTH PUMPKIN."—We have received from Mr. JOSEPH CLARKE, of this city, (No. 82 Washington-st.,) a pumpkin of the above-named variety, which weighed 103 pounds. It was quite fine in the grain, and would have made the nicest pies, had it been used before decay had commenced.

FINE GESE.—We acknowledge the reception of the carcass of a Bremen gosling, (six months old,) weighing seventeen pounds, from Col. JACQUES, of the Ten-Hills farm, near Boston. Col. J. imported this variety of geese from Bremen, about 25 years since, and has bred them in their original purity ever since. We saw at his place, in December, a most splendid flock of them. In appearance, they are beautiful as swans, and are scarcely inferior to them as an ornament to sheets of water near residences. They are of snowy whiteness, with orange-colored bill and legs. These are the invariable marks of the true breed, and any deviation from them may be regarded as denoting spuriousness. We mention this, as geese with red bill and

legs have sometimes been sold as Bremen. They fatten to a greater extent than any other kind—sometimes reaching the weight of 20 pounds, dressed, at seven months old. Col. J. has killed some at that age which weighed 18½ lbs., when ready for the spit. Their flesh, as we can attest, is of superior quality.

Mr. E. CHEESBRO, of Guilderland, in this county, reared, last season, 22 goslings from two geese. One pair of the goslings were sold for \$3, the other 20 were killed at Christmas, and weighed from 12 to 16 lbs. each, and sold for 75 cents each. The 22, therefore, brought the aggregate sum of \$18—a good income (exclusive of feathers,) for two geese. The goslings were from Bremen geese, and by an African gander. The African is of larger frame than the Bremen, but does not appear to have as great a tendency to fatten.

**DIFFICULTY IN MAKING BUTTER.**—The difficulty of procuring butter by churning, spoken of by one of your correspondents in the January number of the Cultivator, is not unfrequently experienced in the fall and winter seasons, where milk and cream are managed in the ordinary way. Hence, some of the best butter makers prefer scalding the milk in cold weather. Mr. WM. MERRIFIELD, of Guilderland, who received a premium for butter from New-York State Ag. Society, in 1842, adopts the following mode. In winter, the milk stands in the cellar twelve hours; is then scalded over a slow fire to near boiling heat; the pans removed to the cellar; the cream only churned, which seldom requires more than five minutes to produce butter. I can testify to the superior quality of Mr. M.'s butter, having been using at my table for some days, a sample made in the way described, and which is as high colored and nearly as rich as the best of June butter, though the cows were only fed with hay, and no coloring substance used.

**SALE OF DURHAM STOCK.**—We understand GEO. VAIL, Esq., of Troy, has recently made sale of a superior Durham bull calf to JOHN HOWITT, Esq., of Guelph, Upper Canada. Mr. HOWITT, we learn, has a fine herd of Durhams, and has made this purchase to cross with his former stock. This calf was got by the premium bull Meteor, and is out of the imported roan cow Splendor. Though only six months old, his weight, we are told, is 500 lbs. He will doubtless be a valuable acquisition to Mr. HOWITT's herd, who has shown his zeal in breeding good stock by sending a distance of about 500 miles for an animal, which at this season of the year, he was under the necessity of transporting for the greater part of that distance by rail-road.

**ATTENTION** is invited to the advertisement of Messrs. GRANT & Co., in this paper. Mr. G. informs us that he has made about three hundred of their celebrated Fan-Mills, and fifteen hundred of their grain cradles, all of which have been disposed of, as fast as they could be got ready for market. They are enlarging their manufactory, and expect hereafter to be able to supply all the orders they may receive.

**GOOD CROP OF CORN.**—Dr. C. S. BUTTON, of Newark, Wayne Co., N. Y., informs us that he raised the past season, on six acres and eighty-four rods of ground, 1432 bushels of ears of Dutton corn, all sound, and which will give in shelling, one bushel of corn for every two of ears.

**SCIENCE AS APPLICABLE TO AGRICULTURE.**—A. S. ROBERTS, Esq., of Philadelphia, informs us that Prof. W. R. JOHNSON, of that city, is about to deliver a course of lectures on chemistry, applied to agriculture, horticulture and animal economy. Prof. J. is pronounced eminent-ly qualified to make such a course interesting and useful.

**FINE SHEEP.**—The Boston papers mention that GEO. CLARK, Esq., of Otsego Co., N. Y. sold forty long-wooled sheep (Dec. 23th,) to Mr. HISCOCK, of Fanueil Hall Market, at \$9.75 each.

**CORRECTION.**—In our list of post-offices, to which we sent over 15 copies Cultivator last year, published in the December No., Middletown, Conn., was accidentally omitted. The number of subscribers there, was 41.

**A PLEA FOR BIRDS.**—We have a communication from "J. T." in reply to an article in our No. of Nov. last, headed "A Plea for Fruit," and signed "X," which we had intended to have published this month. But on reading it more carefully, we have come to the conclusion, much as we fear it will disappoint our friend "J. T.," that it is not best to publish it. Had we observed the paragraph in the article of "X," at which "J. T." takes offence, before it went to press, we should certainly have omitted it. We cannot, however, believe that the public would be benefitted by a controversy on the subject.

**A** correspondent at Versailles, Ky., writes,—"I would not be without the Cultivator for ten times its price. I have taken it for the last six or seven years, and have the volumes nicely bound, and desire to leave them a legacy to my children. Our staples are hemp and live stock. Our soil is rich, but most of us have too much land, and indeed most of us have too much stock of the unprofitable kind. We pay too little attention to fruit and convenient fixtures on our farms." We trust the defects in Kentucky husbandry, of which our correspondent so frankly speaks, will not much longer continue. The natural capabilities of that noble state are immense, and we cannot but hope that they will soon be appreciated and improved.

**WEATHER IN VIRGINIA.**—Extract from a correspondent, dated Waynesboro, Jan. 4: "We had a fall of snow here some two weeks ago, of about 2 feet deep. It lasted but about a week. Since Christmas, the weather has been quite warm—mercury has stood at 66 some evenings after dark, on the windward side of houses. Health of the country good. Wheat in the ground looks pretty promising. Farmers busy plowing corn land."

**GREAT SLAUGHTER OF SHEEP.**—LEVI J. HOPKINS, writes us from Throopsville, N. Y., under date of Dec. 29th, last:—"Ontario county abounds in fine sheep, and Livingston in fine cattle and sheep. Many thousand sheep have been slaughtered here the present fall and winter, for their skins and tallow; and being unusually fat, the business is said to be profitable. Thirty thousand have been killed at one place in the town of Richmond, and from ten to twenty thousand each in three other places in the same county."

**FRUIT.**—In the same letter from which we take the above, the writer says—"one thing I thought worthy of remark; I saw no evidence of the "knots" on plum trees west of Genesee river. Orchards seem to thrive remarkably well. The famous Northern Spy apple, I found very generally engrafted through the country; but in only two instances did I find the fruit. It is truly excellent, and justifies the high praise bestowed on it."

**BLACK SEA WHEAT.**—R. S. RANSOM, of Perryville, N. Y., states that he obtained 233 sheaves of Black-Sea wheat from one bushel of seed, which he thinks will yield a bushel to the dozen, or 23½ bushels. The grain very plump and heavy.

**GOOD RETURNS.** Mr. T. H. AUSTIN, of Canton, Ct., who is for a portion of the time engaged in the management of a small farm, gives us the following statement in regard to his products for the past season. They indicate good management, and show corresponding results:

"The soil where I live is hard and stoney, and the pastures are not as good as in many places; yet the two cows I keep have, without extraordinary keeping, earned me, from April 1st, 1846, to Dec. 1st, (besides furnishing a family of three with butter and milk,) \$41.04



cents. Both will give milk within 6 weeks of their coming in. I have fattened two spring pigs, which, at nine months old weighed 619 pounds. I planted two acres of corn, and measured the product of one acre at harvesting, which produced 90 bushels of ears, equal to 50 bushels of shelled.—I have kept 13 hens the past year—they laid from Jan., 1846, to Sept. 12, 1300 eggs; during this time, all set and hatched over one hundred chickens. At the latter date I bought several more, and killed some before the end of the year. I have now 31, which I intend to keep the present year. My object has been to get the most profit at the least expense, instead of doing great things where it would require great expense. In doing this, I have endeavored to take good care of every thing, that no department of my business should suffer at the expense of the other."

**SOUND REASONING.**—A correspondent at Chuckatuck, Nansemond county, Va., says—"Some of our farmers contend that your mode of farming does not suit them. Now, in part, at least, I think they are mistaken. All farmers should understand the general principles of agriculture, and any information on these points, no matter whence it comes, ought to be considered valuable. Light on any subject is what is wanted. There are none so blind as those who will not see. I for one, do know that the Cultivator throws much light on almost every subject connected with agriculture, whether in reference to this or any other section of country."

**IMPROVEMENT.**—Mr. A. W. HOWLETT, of Castile, Wyoming county, N. Y., informs us that he removed from Troy to his present location, in 1843. The farm on which he resides had been so "run down" previous to his occupancy, that it would produce only ten bushels of wheat to the acre. By the use of clover and good tillage, he states that he has raised the yield of wheat to 22 bushels per acre. His first crop of corn was 20 bushels per acre; his second 30; and third nearly 40. His hay crop was at first one ton per acre; it is now two tons. This is encouraging.

Mr. PEARL LEWIS, of Windham, N. Y., writes us in reference to the influence of agricultural publications—"That there is a spirit of improvement abroad, is evinced by the alteration for the better in the appearance of our farms, and in the disposition manifested for reading and inquiry." Mr. LEWIS has our sincere thanks for the zeal he has manifested for the prosperity of our work. If a few persons in each county will take hold of the business as he has done, our subscription list would soon be greatly increased.

**EDS. CULTIVATOR.**—In your January number, you make mention in regard to the Crimson Cone Strawberry, described in my published article as *staminate*, that you are informed it is pistillate. As the correction was from myself, I wish it so understood, for in your mention of it, it would seem to be otherwise. I sent the correction the moment I perused the published article in your paper, and it crept in whilst transcribing descriptions of 24 varieties for your Cultivator and the Farmer's Cabinet. WM. R. PRINCE.

**MOWING MACHINE.**—In our December number an inquiry was made in regard to a mowing machine. Maj. J. B. DILL, of Auburn, informs us that such a machine is manufactured by OBEY HUSSEY, of Baltimore, Md., who is the inventor and patentee, and also by T. R. HUSSEY, of Auburn, N. Y. The operation of these machines is said to be quite different from that used for cutting grain—the former cutting the grass as even and as close to the ground as it can be cut with a scythe. "It will cut from 15 to 20 acres per day, with one horse and one man to drive. The cut grass needs not to be spread, as it spreads itself in falling over the knife."

**GOOD SHEEP.**—WILLIAM KIRK, of Salem, Columbiana Co., Ohio, writes—"there has been a great deal said about the good qualities of sheep and wool; but

farmers should keep that breed which would yield them most profit. I have had the common sheep, the Irish, the Merino, the Bakewell or Leicester, and the broad, or fat-tailed breed; but I now keep the Dishley [or Leicester,] which I think the most profitable of any. I have taken the premium for three years at our agricultural exhibitions. I also sold two hind quarters for two dollars and thirty-two cents, (a very high price for this section,) and sold some of my lambs at ten dollars a piece. My flock, (two thirds of them ewes with lambs,) averaged one year within a few ounces of seven pounds to the fleece, for which I got within five cents per lb. as much as they did for their best Merino."

**TO PREVENT DOGS FROM KILLING SHEEP.**—Mr. ELIJAH M. DAVIS, of White Plains, New-York, states his mode of protecting his sheep from dogs, is to put bells on one or two sheep in each flock. He says, "Before I put bells on my sheep, I was troubled considerably with dogs; but since I have belled them I have not been troubled at all, while some of my neighbors who did not use the same precaution, have suffered more or less. A sheep-killing dog, is a sneaking creature, and when they start up the sheep, bells make a noise and the dogs sneak off. If the sheep are within half a mile of the farmer's house, the bells will give an alarm. During the night, sheep are generally still unless they are disturbed; and if the bells are heard during the night, we may expect that something disturbs them."

**BERKSHIRE HOGS.**—Extract from a letter received from Mr. ISAAC DILLON, dated Zanesville, Ohio, Dec. 12, 1846:—"I still adhere to the Berkshire breed of swine. I have just killed several pigs of one litter, 14 months old; they were wintered on two ears of corn each per day, were turned into clover in April without any additional feed whatever through the summer, and were only fed corn in the field six weeks in the fall, they weighed from 236 to 300 lbs.; though they were never as fat as they would have been, had the same feed been given them in a pen. The black Sussex pigs are still to be seen in the neighborhood. They are a good breed, and I intend to get a boar of a cross of this breed to put to my Berkshire sows."

**SUGGESTION.**—A correspondent suggests that a great deal of information might be obtained by different individuals undertaking experiments in relation to various branches of agriculture, such as determining the value of various manures for particular purposes, the best mode of applying them, &c. He thinks that many of our correspondents would be willing to undertake these experiments if they were particularly desired to do it. We are aware that the conducting an experiment on a proper scale to render its results reliable, requires the expenditure of considerable time and attention, and the experimenter may not always find himself, in a pecuniary way, fully remunerated. The trials, however, if conducted as all such trials should be, will tend to the development of *truth*, and this, whatever may be its bearing, will prove useful. To the mariner, it is as essential that the rocks and shoals should be correctly laid down on his charts, as that the safe channel, for his vessel should be delineated. So in agriculture, the favorable as well as the unfavorable principles must be known, before the farmer can be certain that his course is the true one. Hence the first and great object in making experiments, is to ascertain some fact not before established. There are in the country many farmers who are abundantly able to undertake experiments of the kind suggested, and who possess all the qualifications for conducting them in a proper manner. Will they not, for the advancement of agricultural knowledge, and the promotion of their own and the country's interest, engage in the work? We should be glad to receive the names of such as are disposed to accede to this proposition.

## PLANK ROADS.

NEXT to the direct improvement and good cultivation of the soil itself, there is perhaps nothing more essential to rural prosperity than good roads. The constant and important bearing which they have on the farmer's convenience and comfort, in marketing products, in the multifarious business which he must yearly transact, in collecting information, in social intercourse, and in short, in every thing which leads him off his own farm,—render their improvement highly worthy the attention of every patriotic and public spirited man.

A fine M'Adam road is usually considered the most perfect road for the use of the people at large. But perfect as this is, well made plank roads are better, and incomparably cheaper. M'Adam roads often cost *thirty thousand dollars* per mile. Fine plank roads may be made for *one-twentieth* part of that sum.

Much valuable information on the construction of plank roads, is given in a late communication to the Syracuse Daily Star, by GEORGE GEDDES, of Fairmount, Onondaga Co., N. Y., who superintended, as engineer, the construction of twelve miles of such road in that county, the past year. A few of the principal items can hardly fail to be interesting.

A single track consists of a *plank floor* eight feet wide, the upper surface of which is even and level with the surface of the road on each side. Where there is not an extraordinary amount of travel, one track is enough, no difficulty whatever occurring in turning out on the level earth, if it is of hard and compact material. The plank is three or four inches thick, laid crosswise of the road, on sills four inches square, imbedded in the earth. The earth must first be made mellow and fine, and even with the top of the sills, so that when the plank is laid on, there shall be no vacancies beneath. This latter requisite is of great importance to the preservation of the plank; as after a series of years, decay has been found to exist only at those points where the earth below did not touch the plank. The plank keeps its place without any fastening. The ends must not be laid even, otherwise the wheels of the vehicle will be apt to slide along the edge, in the attempt to regain it, after passing off in meeting teams. Perfect drainage is highly important. Where the amount of travel is moderate, three inch plank is thick enough; where it is great, four inch is best. It is much better for such roads to *wear out* than to *rot out*, hence the tolls should be low, to invite travel.—The Canada roads are made of three inch pine plank, and usually last about eight years.

The cost per mile, of the road already spoken of, was as follows:—

Sills, 4 in. sq. 14080 feet, at \$5 pr. 1000.....	\$ 70 40
8 feet width plank. 3 inch, 126720 ft. ".....	633 60
Laying and grading, \$1 per rod.....	320 00
Engineer, superintendence, &c, 10 per ct.....	102 00
Gate houses, about.....	100 00
Add for 4 in. road, 1226 ft.....	211 00
Sluices, bridges, contingencies.....	63 00
	<hr/> \$1500 00

Being made on the site of an old road, the right of way cost nothing. The stock cannot now be purchased at par. The work was all done by the day, by which some thousands of dollars were saved on the twelve miles. The plank should be of pine or hemlock, or some wood not easily warped.

A single quotation from the communication, as to the value of such roads:—"I have seen a M'Adamized road taken up, eight feet in width, to make room for a plank track—and men who have travelled over the best roads in England, say there is not in Great Britain as good a road as the Salina Plank Road."

T.

INDUSTRY.—"There is more fun in sweating an hour, than in yawning a century."

## AGRICULTURE IN CONNECTICUT.

We are indebted to WM. MAKINSTER, Esq., of Middletown, Ct., for copies of the reports of Committees, for the Middlesex County (Ct.) Agricultural Society, at its last exhibition, and also for a copy of the address delivered on that occasion, by Prof. JOHN JOHNSTON.

Judging from these documents, which we have no doubt are good evidence in the case, the state of agriculture in that section must be improving. The report of the committee on farms, of which Mr. MAKINSTER was chairman, speaks of several farmers who have reclaimed considerable ground by under-draining. Mr. ASA HUBBARD, is stated to have reclaimed several acres by draining. "Some few of the drains," it is said, "are open; but they are generally under-ground drains, so constructed that the ground can be plowed without injury to them; in short, no one would know that there were any drains if the outlets were not seen. He has so constructed one of the main drains as to carry the water round the margin of the lot, and thus water a strip of land about two rods wide, which produces twice as much grass per acre as the remainder of the field."

Bone manure is stated to have been used with very favorable results by Mr. ANDREW COE, of Middlefield. It is said—"he has improved his land and raised good crops where but little would have grown without manure, by using bone-dust. He uses from 10 to 50 bushels per acre, and his crops, this season, show to the satisfaction of the committee, that money for the purchase of bone-dust, as a top-dressing for grain or roots, is well laid out."

The principal departments of the show, appear to have been well filled; the cattle, in particular, are spoken of as having been of superior quality. Among the successful competitors for premiums, we notice the frequent recurrence of the name of COE, and on a particular examination, we find that *nineteen* persons of this name received *fifty-seven* premiums at this exhibition. Verily, "what's in a name?"

Of the address of Prof. JOHNSTON, it may be said, without intending a *puff*, that it is of a high character, abounding in sound views in regard to the principles of Agriculture, the physiology of plants, and the composition and action of soils. We should be glad to furnish a more extended notice of it, together with some extracts, but our limits will not admit of our doing this at present.

## FACTS AND OPINIONS,

Condensed from Various Exchange Papers.

THREE CROPS A YEAR.—Amos Charlton, of Chelmsford, Mass., who sells several hundred dollars worth of farm and garden products from a little more than 20 acres of land, tried an experiment in planting beans with early potatoes, which he says has more than answered his expectations. After plowing and hoeing the potatoes, the beans were planted between the rows, in hills twenty inches apart, and hoed once without plowing. The potatoes were dug at midsummer, and sold for a dollar per bushel. The potato ground was then sown with turneps, thus giving a third crop.

ASHES AND PLASTER FOR MANURE.—J. Johnston, of Geneva, says that on his soil, which is a gravelly clay, one bushel of plaster will do more good to his clover than 40 bushels of ashes—and that on muck soils he never perceived any benefit from plaster, though ashes may be useful. All the experiments we have tried on sandy and gravelly loam, show the superiority of plaster to ashes, applied to grass lands. J. Johnston also says, that he has found the best way of applying stable manure in autumn, is to spread it over the surface, and plow it in the next spring. This en-



tirely accords with our own experience, whatever hypothetical reasoning may say to the contrary. It is perfectly evident, however, that little evaporation can take place during winter, while much that is soluble may become diffused through the soil.

**EXPORTING WOOL.**—Hamilton Gay, of New-York, who has had much experience in exporting wool, in speaking of the cost of transporting the products of the great west, to the ocean, says, "Wool forms the only exception. It is worth ten times as much as iron of equal weight, and may be sent forward from the place of its growth thirty times cheaper than wheat of equal value."

**DESTROYING PEA BUGS.**—A correspondent of the American Farmer tried a very simple and satisfactory experiment to prevent bugs in peas. Having discovered the egg in each pea while yet in the pod, he gathered them as soon as they were ripe and thoroughly dry, and closed them air tight in bottles. The insect could not grow without air, and next spring not a bug was to be seen.

**RICH ARTIFICIAL MANURE.**—Samuel Davidson, of Greece, N. Y., obtained one hundred and twenty-two bushels of corn per acre on land to which three bushels of the following manure was applied:—One barrel of human urine, to which was added six pounds of dissolved sulphate of magnesia (epsom salts,) was mixed with enough gypsum to moisten the whole. On another acre which had three bushels of dry plaster, there were ninety bushels. What part of the difference in the crops of these two acres, the mixture produced, would be interesting to know.

**POULTRY.**—A correspondent of the Poughkeepsie Telegraph, had from 30 hens, the past season, up to September 1st, 3,522 eggs, and 200 chickens. The management consists in a warm dry shelter for winter; feeding with oats soaked twelve hours in warm water; and a free supply of burnt clam shells, powdered fine. The chickens are fed with a mixture of two parts of oats and one of rye, ground to meal.

**ENJOYMENT OF LIFE.**—Two wealthy citizens of Boston, now considerably advanced in life, were lately conversing in regard to the period when they had best enjoyed themselves. "I will tell you," says one, "when I most enjoyed life: soon after I was twenty-one, I worked for Mr. —, laying stone wall, at twenty-five cents per day." "Well," replied the other, "that does not differ much from my experience; when I was twenty, I 'hired out' at seven dollars per month; I have never enjoyed myself better since." The experience of these two individuals teaches—1st. that one's happiness does not depend on the amount of his gains or the station he occupies; 2d. that very small beginnings, with industry and prudence, may secure wealth.

**HYACINTHS IN WINTER.**—Hovey's Magazine describes the mode of producing a very pretty effect by growing hyacinths in baskets of moss. An open worked French basket may be procured, the inside lined with moss, and a glass or other dish filled with moss, to hold the bulbs, placed inside. The moss in the dish is to be kept well moistened, but the bulbs must not be overflowed with water, or decay will follow.

**KEEPING POTATOES.**—The Edinburgh Journal of Agriculture says that if potatoes are immersed for four or five days in a solution consisting of an ounce of common liquid ammonia and a pint of water, they may be kept a year without the least deterioration in quality. The ammonia afterwards entirely evaporates, and does not affect the flavor in the slightest degree. If kept immersed a much longer period than just stated, the potatoes are injured. The same effect may be produced by immersion in a strong solution of salt; but in this case they require soaking in several successive portions of water, to remove the salt. It is stated, that

potatoes treated with ammonia, were kept ten months in a warm kitchen closet, and when used were found perfectly good. T.

#### PRICES OF AGRICULTURAL PRODUCTS.

New-York, Jan. 18, 1846.

FLOUR—Genesee, per bbl., \$5.62½—Ohio and Michigan, \$5.31½a\$5.44.	
GRAIN—Wheat, per bushel, \$1.05a\$1.17—Rye, 86c.—Barley, 63a65—Oats, 44a45—Corn, Northern and Jersey, 74a76.	
BUTTER—Orange County, per lb., 19a22c.—Western dairy, 12a13c.—Ohio, 7a10c.	
CHEESE—Best shipping, per lb., 7a7½c.	
BEEF—Mess, per bbl., \$8.75a\$9.50—Prime, \$6.50a\$7.25.	
PORK—Mess, per bbl., \$11.75a\$12—Prime, \$9.62½a\$10.	
HAMS—Smoked, per lb., 6½a7½c.	
LARD—Per lb. (new) 7½a8½c.	
HEMP—Russia, clean, per ton, \$215a\$225—American, dew-rotted, \$115.	
HOPS—Per lb., first sort, 9a10c.	
TOBACCO—Connecticut, per lb., 10a11c.—Kentucky, 3½a4c.	
SEEDS—Flax, per bushel, \$1.25a\$1.28—Clover, per lb., 6½a7c.—Timothy, (herds-grass,) per bu., \$2.50.	
COTTON—New Orleans and Alabama per lb., 9½a13½c.—Florida, 10½a12½—Upland, 9½a12½c.	
WOOL—(Boston prices.) Jan 19:	
Prime or Saxon fleeces, washed per lb.,	38a40 cts.
American full blood fleeces,	32a33 "
" three-fourths blood fleeces,	25a28 "
" half blood do	23a25 "
" one-fourth blood and common,	20a22 "

P. S.—Jan. 26. Since the above was put in type, the steamer Hibernia has arrived at Boston, bringing news twenty-eight days later from England. A very considerable advance has taken place in the price of bread-stuffs, and some rise in the value of cotton. The advance in flour is 5 to 6 shillings sterling per barrel—equal to \$1.25 to \$1.50—and the advance in Indian corn is from 10 s. to 12 s. per quarter of 480 pounds. The present value of wheat in England is put down at from 80 s. to 86 s. per quarter of 560 lbs. Allowing 60 lbs. for a bushel, this would give the price \$2.14 to \$2.30 per bushel. Indian corn was 72 s. per quarter of 480. Some excitement was occasioned by the news. In New-York the rise on flour was 75 cents per bbl., and on corn 10 to 12 cents per bushel. In Boston the advance was also as much or more.

#### LIVE STOCK MARKET.

Brighton, Mass., Monday, Jan. 11.

At market 550 Beef Cattle and 200 Stores, 6 yokes of working Oxen, 30 Cows and Calves, 6000 Sheep and Lambs, and about 300 swine.

**BEEF CATTLE.**—Extra at \$5.75 first quality, 5.25—second quality, \$4.05 @ \$4.25—third quality, \$3.50 @ \$4.

**COWS AND CALVES.**—Sales were noticed at \$17, 18, 20, 21, 23, and \$35.

**SHEEP AND LAMBS.**—Sales of lots at from \$1.33 to \$2.12, and \$1.03 to \$2.25, and \$3.42.

**SWINE.**—Sales at wholesale at 4½ c. for Sows, and 5½ for Barrows. At retail from 5½ to 6½ c.

We are indebted to Mr. S. H. BENNETT, for a copy of the Boston Daily Advertiser, containing a statement in regard to the sales at Brighton Market, for the years 1846, 1845, and 1844, as follows:

38,670 Beef Cattle, sales estimated at.	\$1,198,770
15,164 Stores,	303,280
105,350 Sheep,	162,239
41,940 Swine,	206,824
	\$1,871,113
1845.	
48,910 Beef Cattle,	} estimated sales
13,275 Stores,	
107,960 Sheep,	
56,580 Swine,	\$1,893,649
1844.	
37,310 Beef Cattle,	} estimated sales
4,136 Stores,	
72,274 Sheep,	
52,740 Swine,	\$1,689,374

#### ATLANTIC GARDEN AND NURSERY, Smithtown, Long Island, near New-York.

THE subscribers offer for sale at very low prices, a large assortment of Fruit trees, including Apples, Pears, Peaches, Cherry, Quince, Nectarine, Plum, Apricot, &c., of the most approved sorts. Also, the choicest kinds of Gooseberries, Raspberries, Currants, Strawberries, &c. &c.

The assortment of Ornamental Trees, Shrubs, and Herbaceous Plants is now very extensive, including over 10,000 Evergreen Trees, and Shrubs.

The stock of Apples and Pears, containing over 35,000 trees, includes the finest sorts in cultivation.

Orders by mail, or otherwise, will receive prompt attention, and trees will be packed in the best manner, and forwarded to any part of the country agreeable to order.

Catalogues sent to every post-paid applicant.

Feb. 1—3d.

P. DOANE & SON.

## ANOTHER GREAT DISCOVERY IN VACCEROLOGY.

### HOW TO JUDGE A COW.

SINCE the days of Doctor Jenner's discovery of vaccination, or the cow pox, being an antidote to the small pox, nothing has appeared so extraordinary in that department of natural history as the discovery by Mr Guenon, the son of a French Gardener, of a means of ascertaining the quality of milk cows by external and visible signs over the milk region of the animal.

The signs have been reduced to a clear system, and by committees of various agricultural societies in France pronounced "infallible" after repeated and most careful trials.

The work was translated by Mr. Trist, of the State Department, and published with numerous engravings explanatory of the system, first in the Farmer's Library. But the publishers not willing to withhold a discovery so important and valuable from the poorest person owning, or wishing to own a cow, have published it in a separate and cheap form, and it may be had at The Tribune office, or at most of the cheap publication offices in the United States.

While those who have given to this work even the slightest tests, aver that, with it for their guide, they are not fearful of ever again buying an indifferent cow; others, who have been more minute and careful in applying the "signs" to living animals, declare like the French agricultural committees, that the marks are obvious and worthy of every reliance.

The following from sources of unquestionable veracity and practical knowledge, are submitted in proof of the truth of this wonderful discovery. But, independently of the great value of the cow-book for the purpose in question, other matters attached to it will fully recompense the purchaser for the trifling cost of the book itself, which is but 37½ cents. Booksellers and publishers may be supplied at the usual discount.

Under the operation of this system, which enables every one to select and put aside for the butcher calves that will be sure to prove bad milkers, the whole race of milk cattle may be rapidly improved throughout the union. Every great discovery appears to be strange, and some of them incredible in the first instance, and few more than vaccination itself. With such testimony in support of this discovery of M. Guenon, no paper in the Union ought, we would think, to withhold a knowledge of it from their readers.

We have received quite a number of letters from different parts of the country, fully corroborating the theory of M. Guenon. We select for publication the following:

Princeton, Mass., October 15, 1846.

DEAR SIR:—I received your favor of the 8th inst., desiring me to state my opinion of the value of M. Guenon's Treatise on Milk Cows, translated from the French, and published in the Farmer's Library. On my first meeting with this treatise, I was impressed with its value from my previous knowledge of some general marks whereby the milking properties of cows may, in some measure be determined, and from the fact that I had myself noticed the oval marks above the hind teats, mentioned by M. Guenon, as indicating good milking qualities, that I immediately commenced the study and application of his method to every cow that came under my observation. I have examined more than 100 cows, and after carefully marking their escutcheons, I have become satisfied that M. Guenon's discovery is one of great merit, and can be relied upon as true. I have no doubt that I can judge very nearly as to the quantity and quality of the milk any cow will give at the height of her flow, and also the time she will continue in milk after being with calf.

The way taken to convince myself of the truth of M. Guenon's method has been to visit the cow-yards of some of our principal dairy farmers, and examine the escutcheons and marks on their cows, and make up my judgment as to the quantity and quality of milk each cow would give at the height of her flow, and how long she would continue in milk after being with calf; then inquire of the owners how much milk their several cows would give at the height of their flow, and how long they would hold out after being with calf; comparing the owner's account with my own judgment. I find I have mistaken in only five cases out of more than one hundred examined.

I have great confidence in M. Guenon's method of testing the milking properties of cows and consider it one of the great discoveries of the age. The advantage of this discovery to our dairy farmers, enabling them, as I think it does, to determine the milking properties of their young stock at an early age, must be very great, and will be appreciated by every one who is in the slightest degree acquainted with the subject. In my opinion, no dairy farmer, after acquainting himself with M. Guenon's discovery, need possess himself of a bad milking cow.

M. Guenon informs us that his system is applicable to calves three or four months old. I have traced the escutcheons upon calves as early as two or three weeks old, and see no reasons why their value as future milkers may not be judged of at this age as well as at any other age. Yours, respectfully,

To J. S. SKINNER, Esq.,

JOHN BROOKS.

Editor of the Farmers' Library, New-York City.

Patterson, N. J., Dec. 19, 1846.

DEAR SIR:—I have read with great satisfaction, M. Guenon's work on Milk Cows, by which one can judge by certain infallible signs, the milking qualities of the animal. I have compared the marks he gives for his first grade Flanders Cow, and find they correspond with the escutcheon of my favorite Devon cow Ellen, that has taken the first premiums at the last two cattle shows of the American Institute. My farmer has great faith in M. Guenon's work and so has one of my neighbors, a knowing Scotch milkman, who keeps fifty cows. He says that after careful examina-

tion, he places confidence in these marks, and they will govern him in his future purchases.

I return to you my sincere thanks for giving to us farmers this valuable treatise of M. Guenon's. I shall hereafter make my selection of the calves I will raise from my choice stocks, from the marks given by this author. I think every farmer should own this work. With regard, yours, &c., ROSWELL L. COLT.

To the Editor of the Farmers' Library.

The above work is published and sold by GREELEY & M'ELRATH, New-York, publishers of Skinner's Farmers' Library and Monthly Journal of Agriculture.

Three copies sent by mail for \$4.00.

### SCIONS OF FRUIT TREES.

WM. R. PRINCE & CO., will furnish from their extensive specimen orchards, assortments of scions for ingrafting during the winter, on the following terms, and they deem the scions from their trees invaluable for nurserymen, on account of their superior accuracy. Collections comprising 40 or more varieties at 25 cents each, the number of grafts in proportion to their rarity; but when a full dozen are desired of each, the price will be 50 cents. Smaller assortments will be 50 cents each variety. These terms apply only to those trees whose price does not exceed 50 cents each in the catalogues; those higher priced will be charged at the same rate for a parcel of grafts, as for a tree. Cuttings will also be supplied of all trees and shrubs which can be propagated by that mode. They will be packed in a superior manner.

Prince's Linnæan Botanic Gardens and Nurseries, Flushing, Feb. 1, 1847.—It

### STRAW AND CORN STALK CUTTERS.

HOVEY'S Patent Spiral Straw and Corn Stalk Cutter, for hand or horse power, five sizes, from \$8 to \$25.

Also, Stevens' Spiral Hay and Cornstalk Cutter—ten sizes. Cuts 1 to 2½ inches long; \$8 to \$30. Rigged for horse-power, \$1 to \$2 extra.

Also, the Pennsylvania Hay and Cornstalk Cutter, for horse-power. This crushes the stalks, and when cut ½ an inch long, they become fine like chaff; price, \$25. For hand-power, \$16. The last two are the best in use for stalks.

Bott's Cornstalk Cutter—price, \$20.

Langdon's Hay and Cornstalk Cutter—price, \$18 and \$20.

Cheap Cutting Boxes, \$5 to \$5.50.

For sale at the Albany Ag. Warehouse and Seed Store, No. 10 Green-st.

### LONG ISLAND HORTICULTURAL SOCIETY.

AT the annual exhibition of this society, held in Flushing, on the 17th, 18th, and 19th of September, 1846, the following premiums, among others, were awarded to WM. R. PRINCE & Co., Proprietors of the Linnæan Botanic Garden and Nurseries.

#### FRUITS.

To Messrs. Wm. R. Prince & Co., for the best 12 varieties of Apples, ..... \$5.00  
To Messrs. Wm. R. Prince & Co., for the largest and best collection, ..... 5.00  
To Messrs. Wm. R. Prince & Co., for the best 12 varieties of Peaches, ..... 8.00  
To Messrs. Wm. R. Prince & Co., for the largest and best collection, ..... 8.00  
To Messrs. Wm. R. Prince & Co., for the best 6 varieties of peaches, ..... 3.00

#### FLOWERS.

To Messrs. Wm. R. Prince & Co., for Achimenes picta, showing high cultivation, ..... 2 00  
To Messrs. Wm. R. Prince & Co., for the best 30 varieties of cut Roses, ..... Certificate

#### PREMIUMS AWARDED TO WM. R. PRINCE & Co.,

At the Fair of the Queens County Agricultural Society, on the 9th of October, 1846.

For the best and Greatest variety of pears;  
For the best and greatest varieties of apples;  
For the best 12 table apples;  
For the best and most beautiful bouquets;  
For the best and greatest display of flowers.  
Feb. 1, 1847.—It.

### NEW SEEDS.

JUST received at the ALBANY AG. WAREHOUSE and SEED STORE, a full and large assortment of FIELD, GARDEN, and FLOWER SEEDS,

of the growth of 1846. The above seeds having been grown and put up with the utmost care for this establishment, they are warranted genuine and true to their names. Farmers, gardeners, and dealers will find it for their interest to examine the assortment and prices before purchasing elsewhere.

Also for sale as above,

Jewett's Improved Canada Corn,

Black Sea Spring Wheat,

Hall's Early and Carter Potatoes, &c., &c.

LUTHER TUCKER.

### FARMER WANTED.

WANTED a man with his wife, (one without children would be preferred,) to take charge of a farm of about 200 acres, in one of the pleasantest districts in New-England. The wages would be good and the situation probably a permanent one. Address, (post-paid,) box No. 1668, Post Office, Boston.

Jan. 1—2t.



### NEW-YORK AGRICULTURAL WAREHOUSE. (ON COMMISSION.)

**A. B. ALLEN**, 187 Water-st.—Farming Implements and Seeds, Wire Cloths and Sieves; Fertilizers, such as Guano, Lime, Plaster of Paris, &c.; Fruit and Ornamental Trees and Shrubs; Improved Stock, Horses, Cattle, Sheep, &c.

Editor of the American Agriculturist, a monthly publication of 32 pages, with numerous engravings. Price \$1 a year. Jan. 1—2t.

### NEW ORLEANS AGRICULTURAL WAREHOUSE.

**THE** subscriber will keep constantly on hand for sale farming and plantation implements of all kinds suitable for the southern market. He will also execute orders for improved stock, such as horses, cattle, sheep, &c., and receive subscriptions for the American Agriculturist, a monthly publication of 32 pages, with numerous engravings. Price \$1 a year. **R. L. ALLEN.** New Orleans, Jan. 1, 1847.—2t

### TO WOOL-GROWERS.

**THE** subscribers have a tract of land lying in Patrick Co., Va., consisting of about ten thousand acres, which they wish to sell or rent. It has on it immense quantities of the largest timber, with abundance of water, and water power. A portion of the land has been cleared, and produces the finest grass in the world. We would like to dispose of it, or to enter into partnership with any gentleman who would furnish a flock of sheep, and go into the business of growing wool. Apply by letter to either of the subscribers, at Cumberland Court House, Va., or in person to Col. A. Staples, Patrick Co., Va., who will show the land.

**WILLIAM W. WILSON**  
**WILLIS WILSON.**

Sept. 1—6t.

### AGRICULTURAL WAREHOUSE.

183 Front-st., New-York.

**THE** subscriber offers for sale an extensive assortment of Farming and Gardening utensils, consisting in part of plows of Freeborn's, Minor's, Horton & Co.'s, Prouty & Mears', and Ruggles, Nourse & Mason's patterns. The Locked Coulter, and Wrought Share Plow.

Corn Shellers, Fanning Mills, Grain Cradles, Corn and Cob Mills, Straw Cutters, of Greene's, Hovey's, Eastman's, and other most approved patterns.

Horse Powers, Threshing Machines, &c. Gin gear, Mill, Horse-power, and all other castings, constantly on hand. Also a general assortment of Brass, Copper, and Iron Wire Cloth, for Paper, Rice, and other mills. Seives, Screens, Riddles, &c., &c.

Persons ordering articles from the subscriber may depend upon having them made of the best materials and in the most workman-like manner.

**JOHN MOORE.**

New-York, Oct. 1, 1846—6t

### TO NEW-YORK FARMERS AND EMIGRANTS.

**ONE** hundred and fifteen thousand acres Illinois Lands for sale, in tracts of 40, 80, 120, 160 acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the state, and are situated in the counties most densely settled, viz, Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Mason, McLean, Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from \$3 to \$5 per acre.

A correspondent of one of the New-York papers, writes respecting this section of Illinois as follows:

"Beardstown, Cass Co., Ill., Jan. 10, 1846.

**THE RICHES OF THE WEST.**—GOTHAMITES ON THE WING.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of this western country, and I must say the beautiful prairies of Illinois, far exceed what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

"A New England man would hardly believe me if I tell him that some farmers here produce ten thousand bushels of corn, and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me that he raised the last year 6000 bushels of corn, and it was all produced by the labor of two men only.

"Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow."

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable, and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to **D. B. AYRES**, Esq., of Jacksonville, Ill., or the subscriber, will receive prompt attention. As many persons out of the state have an idea that the taxes are very burdensome in Illinois, we state that they range from \$1.50 to \$2.00 per annum, on 80 acres of land.

**JOHN GRIGG.**

Jan. 1, 1847.—6t

No. 9 North Fourth-st., Philadelphia.

### WILD TURKEYS.

**FOR** sale, two pair of wild turkeys—one pair of which were sent from Illinois in the fall of 1844, and the others were reared from them the present year. They are well domesticated, and are splendid birds. Price, \$10 per pair. Inquire at the Office of THE CULTIVATOR.

Dec. 1—2t.

### WIRE CLOTH SIEVE AND SCREEN MANUFACTORY.

**THE** subscriber has constantly on hand a large assortment of the above articles, which he offers at the lowest market prices.

July, 1846—10 mos.

**D. L. CLAWSON.**

191 Water-st., New-York.

P. S.—All kinds of wire work manufactured to order.

**GUANO.**—200 tons, the balance of the ship Shakspeare's cargo from Ichaboe, in tight casks, for sale in lots to suit purchasers, by **E. K. COLLINS & Co.**, 56 South-st.

The many experiments made this season from this cargo, not only prove the great gain in using it, but that it is at least equal if not superior to any other guano.

Sept. 1, 1846.—if

### I. T. GRANT & CO.'S PATENT PREMIUM FAN MILLS.

**THE** subscribers, manufacturers of these celebrated mills, having enlarged their manufacturing establishment, hopes to be enabled hereafter to supply promptly the rapidly increasing demand for that article. These mills have been repeatedly tried, and the principle upon which they operate thoroughly examined and tested by committees appointed by the State Agricultural Society, and in every instance have been declared greatly superior to any that have come in competition with them. They have taken the first premium at four of the New-York State Agricultural Fairs, (being all at which they have been exhibited,) and at the State Fairs in Pennsylvania and Maryland. Our mills took the first premium, and we were awarded a silver medal for the new improvement, at the Fair of the American Institute in 1846, and they received the highest consideration at the great National Fair, recently held at the city of Washington. Wherever they have been exhibited, they have received the unqualified commendation of agriculturists, and are believed to be the only mills ever invented or manufactured, that will chaff and screen wheat perfectly clean (and at the rate of one bushel per minute) at one operation, taking out the chaff, cockle, and smut at the same time. They will also thoroughly clean all other kinds of grains and seeds by running it through once. We manufacture four sizes, varying in price from \$21 for No. 1, to \$27 for No. 4, and have no hesitation in warranting them superior to anything of the kind now in use.

We also manufacture very superior Grain Cradles, which have taken the first premium wherever exhibited.

Our Fan Mills and Cradles are for sale at factory prices at the following places:

John Mayher & Co., 195 Front-st., New-York.

E. Whitman, 55 Light-st., Baltimore;

Denslow & Webster, Savannah, Geo.;

Fitzhugh Coyle, Washington City;

Baggs & Parsons, Springfield, Mass.;

Pierce, Sweet & Co., Burlington, Vt.;

J. W. Howes, Montpelier, Vt.;

Luther Tucker, 10 and 12 Green-st., Albany, N. Y.

H. Warren, Troy;

J. S. & J. Brown, Newburgh.

Orders thankfully received and promptly attended to, and all goods delivered at Troy, N. Y., free of charge.

**I. T. GRANT & Co.**

Junction P. O., Rens. Co., N. Y., Jan. 1.—if

### NEW-ENGLAND AGRICULTURAL WAREHOUSE AND SEED STORE.

Nos. 51 and 52 North Market-Street, Boston.

**FOR** sale at this establishment, a general assortment of Agricultural and Garden Implements—Howard's Improved Patent Cast Iron Plows of all sizes. Martin's improved Eagle and other Plows; Double Mould Board, Side-Hill, Paring, and other plows, in great variety, and of the most approved patterns. Howard's Subsoil Plows, Cultivators of different descriptions; Willis' Seed Sower, (the best in use;) Geddes' and other Harrows of various patterns; Green's Straw-Cutters, Willis' Straw-Cutters, of various kinds and prices; Gault's Patent Churns, Grindstones or Friction Rollers; Cast Iron Field Rollers, (a very superior and substantial article;) Garden Rollers of cast-iron, different sizes; Iron Rakes of every size and variety; Garden Trowels, Syringes in great variety; Pruning and Budding Knives; Pruning Scissors, and Shears in great variety; Grass Hooks and Garden Shears; Garden and Field Hoes of every pattern; Scufflers every size; Pick Axes, Shovels, Spades, Dung and Garden Forks of every description; Hay Tools, including the very best Scythes manufactured in the country, (in all cases warranted;) Hall's and other Hay Rakes, Pitch-forks, Grain Cradles, Horse Rakes, Sickles, Austin's Rifles, Whet Stones, &c., &c.

Also a complete assortment of Chains, viz:—Fence Chains—Trace do.—Ox do.—Dog do.—Tie-up do. Hale's Horse Power; Hale's Threshing Machine and Winnowing Mills, Garden Engines, &c.

Also Axes, Hatchets, Bill Hooks, Hammers; Axe, Hoe, and Rake Handles; Ox Yokes, Bull Rings; together with every other article important for Agricultural or Horticultural purposes. Harris' Paint Mill, the best in use, is also for sale at this establishment.

### SEEDS, TREES, AND PLANTS.

The subscribers are enabled to furnish seeds of the purest quality, of every variety of field, vegetable, and flower seed; embracing every variety desirable for cultivation.

Also, Fruit, Forest, and Ornamental Trees and Shrubs, of every description.

Orders promptly attended to. **JOSEPH BRECK & Co.** Boston, Sept. 1—4.

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We have received quite a number of letters from different parts of the country, fully corroborating the theory of M. Guenon. We select for publication the following:

Princeton, Mass., October 15, 1846.

DEAR SIR:—I received your favor of the 8th inst., desiring me to state my opinion of the value of M. Guenon's Treatise on Milk Cows, translated from the French, and published in the Farmer's Library. On my first meeting with this treatise, I was impressed with its value from my previous knowledge of some general marks whereby the milking properties of cows may, in some measure be determined, and from the fact that I had myself noticed the oval marks above the hind teats, mentioned by M. Guenon, as indicating good milking qualities, that I immediately commenced the study and application of his method to every cow that came under my observation. I have examined more than 100 cows, and after carefully marking their escutcheons, I have become satisfied that M. Guenon's discovery is one of great merit, and can be relied upon as true. I have no doubt that I can judge very nearly as to the quantity and quality of the milk any cow will give at the height of her flow, and also the time she will continue in milk after being with calf.

The way taken to convince myself of the truth of M. Guenon's method has been to visit the cow-yards of some of our principal dairy farmers, and examine the escutcheons and marks on their cows, and make up my judgment as to the quantity and quality of milk each cow would give at the height of her flow, and how long she would continue in milk after being with calf; then inquire of the owners how much milk their several cows would give at the height of their flow, and how long they would hold out after being with calf; comparing the owner's account with my own judgment. I find I have mistaken in only five cases out of more than one hundred examined.

I have great confidence in M. Guenon's method of testing the milking properties of cows and consider it one of the great discoveries of the age. The advantage of this discovery to our dairy farmers, enabling them, as I think it does, to determine the milking properties of their young stock at an early age, must be very great, and will be appreciated by every one who is in the slightest degree acquainted with the subject. In my opinion, no dairy farmer, after acquainting himself with M. Guenon's discovery, need possess himself of a bad milking cow.

M. Guenon informs us that his system is applicable to calves three or four months old. I have traced the escutcheons upon calves as early as two or three weeks old, and see no reasons why their value as future milkers may not be judged of at this age as well as at any other age. Yours, respectfully,

To J. S. SKINNER, Esq., JOHN BROOKS.  
Editor of the Farmers' Library, New-York City.

Patterson, N. J., Dec. 19, 1846.

DEAR SIR:—I have read with great satisfaction, M. Guenon's work on Milk Cows, by which one can judge by certain infallible signs, the milking qualities of the animal. I have compared the marks he gives for his first grade Flanders Cow, and find they correspond with the escutcheon of my favorite Devon cow Ellen, that has taken the first premiums at the last two cattle shows of the American Institute. My farmer has great faith in M. Guenon's work and so has one of my neighbors, a knowing Scotch milkman, who keeps fifty cows. He says that after careful examina-

tion, he places confidence in these marks, and they will govern him in his future purchases.

I return to you my sincere thanks for giving to us farmers this valuable treatise of M. Guenon's. I shall hereafter make my selection of the calves I will raise from my choice stocks, from the marks given by this author. I think every farmer should own this work. With regard, yours, &c., ROSWELL L. COLT.

To the Editor of the Farmers' Library.

The above work is published and sold by GREELEY & M'ELRATH, New-York, publishers of Skinner's Farmers' Library and Monthly Journal of Agriculture.

Three copies sent by mail for \$4.00.

### SCIONS OF FRUIT TREES.

WM. R. PRINCE & CO., will furnish from their extensive specimen orchards, assortments of scions for ingrafting during the winter, on the following terms, and they deem the scions from their trees invaluable for nurserymen, on account of their superior accuracy. Collections comprising 40 or more varieties at 25 cents each, the number of grafts in proportion to their rarity; but when a full dozen are desired of each, the price will be 50 cents. Smaller assortments will be 50 cents each variety. These terms apply only to those trees whose price does not exceed 50 cents each in the catalogues; those higher priced will be charged at the same rate for a parcel of grafts, as for a tree. Cuttings will also be supplied of all trees and shrubs which can be propagated by that mode. They will be packed in a superior manner.

Prince's Linnæan Botanic Gardens and Nurseries, Flushing, Feb. 1, 1847.—It

### STRAW AND CORN STALK CUTTERS.

HOOVEY'S Patent Spiral Straw and Corn Stalk Cutter, for hand or horse power, five sizes, from \$8 to \$25.

Also, Stevens' Spiral Hay and Cornstalk Cutter—ten sizes. Cuts 1 to 2½ inches long; \$8 to \$20. Rigged for horse-power, \$1 to \$2 extra.

Also, the Pennsylvania Hay and Cornstalk Cutter, for horse-power. This crushes the stalks, and when cut ½ an inch long, they become fine like chaff; price, \$25. For hand-power, \$10. The last two are the best in use for stalks.

Bott's Cornstalk Cutter—price, \$20.

Langdon's Hay and Cornstalk Cutter—price, \$18 and \$20.

Cheap Cutting Boxes, \$5 to \$5.50.

For sale at the Albany Ag. Warehouse and Seed Store, No. 10 Green-st.

### LONG ISLAND HORTICULTURAL SOCIETY.

AT the annual exhibition of this society, held in Flushing, on the 17th, 18th, and 19th of September, 1846, the following premiums, among others, were awarded to WM. R. PRINCE & Co., Proprietors of the Linnæan Botanic Garden and Nurseries.

#### FRUITS.

To Messrs. Wm. R. Prince & Co., for the best 12 varieties of Apples, ..... \$5.00  
To Messrs. Wm. R. Prince & Co., for the largest and best collection, ..... 5.00  
To Messrs. Wm. R. Prince & Co., for the best 12 varieties of Pears, ..... 8.00  
To Messrs. Wm. R. Prince & Co., for the largest and best collection, ..... 8.00  
To Messrs. Wm. R. Prince & Co., for the best 6 varieties of peaches, ..... 3.00

#### FLOWERS.

To Messrs. Wm. R. Prince & Co., for Achimenes picta, showing high cultivation, ..... 2 00  
To Messrs. Wm. R. Prince & Co., for the best 30 varieties of cut Roses, ..... Certificate

#### PREMIUMS AWARDED TO WM. R. PRINCE & Co.,

At the Fair of the Queens County Agricultural Society, on the 9th of October, 1846.

For the best and Greatest variety of pears;  
For the best and greatest varieties of apples;  
For the best 12 table apples;  
For the best and most beautiful bouquets;  
For the best and greatest display of flowers.  
Feb. 1, 1847.—It.

### NEW SEEDS.

JUST received at the ALBANY AG. WAREHOUSE and SEED STORE, a full and large assortment of

#### FIELD, GARDEN, AND FLOWER SEEDS.

of the growth of 1846. The above seeds having been grown and put up with the utmost care for this establishment, they are warranted genuine and true to their names. Farmers, gardeners, and dealers will find it for their interest to examine the assortment and prices before purchasing elsewhere.

Also for sale as above,

Jewett's Improved Canada Corn,

Black Sea Spring Wheat.

Hall's Early and Carter Potatoes, &c., &c.

LUTHER TUCKER.

### FARMER WANTED.

WANTED a man with his wife, (one without children would be preferred,) to take charge of a farm of about 200 acres, in one of the pleasantest districts in New-England. The wages would be good and the situation probably a permanent one. Address, (post-paid,) box No. 1668, Post Office, Boston.

Jan. 1—21.



### NEW-YORK AGRICULTURAL WAREHOUSE. (ON COMMISSION.)

**A. B. ALLEN**, 187 Water-st.—Farming Implements and Seeds, Wire Cloths and Sieves; Fertilizers, such as Guano, Lime, Plaster of Paris, &c.; Fruit and Ornamental Trees and Shrubs; Improved Stock, Horses, Cattle, Sheep, &c.

Editor of the American Agriculturist, a monthly publication of 32 pages, with numerous engravings. Price \$1 a year. Jan. 1—2t.

### NEW ORLEANS AGRICULTURAL WAREHOUSE.

**THE** subscriber will keep constantly on hand for sale farming and plantation implements, of all kinds suitable for the southern market. He will also execute orders for improved stock, such as horses, cattle, sheep, &c., and receive subscriptions for the American Agriculturist, a monthly publication of 32 pages, with numerous engravings. Price \$1 a year. **R. L. ALLEN.**

New Orleans, Jan. 1, 1847.—2t

### TO WOOL-GROWERS.

**THE** subscribers have a tract of land lying in Patrick Co., Va., consisting of about ten thousand acres, which they wish to sell or rent. It has on it immense quantities of the largest timber, with abundance of water, and water power. A portion of the land has been cleared, and produces the finest grass in the world. We would like to dispose of it, or to enter into partnership with any gentleman who would furnish a flock of sheep, and go into the business of growing wool. Apply by letter to either of the subscribers, at Cumberland Court House, Va., or in person to Col. A. Staples, Patrick Co., Va., who will show the land.

**WILLIAM W. WILSON**  
**WILLIS WILSON.**

Sept. 1—6t.

### AGRICULTURAL WAREHOUSE.

183 Front-st., New-York.

**THE** subscriber offers for sale an extensive assortment of Farming and Gardening utensils, consisting in part of plows of Freeborn's, Minor's, Horton & Co.'s, Prouty & Mears', and Ruggles, Nourse & Mason's patterns. The Locked Coulter, and Wrought Share Plow.

Corn Shellers, Fanning Mills, Grain Cradles, Corn and Cob Mills, Straw Cutters, of Greene's, Hovey's, Eastman's, and other most approved patterns.

Horse Powers, Threshing Machines, &c. Gin gear, Mill, Horse-power, and all other castings, constantly on hand. Also a general assortment of Brass, Copper, and Iron Wire Cloth, for Paper, Rice, and other mills. Seives, Screens, Riddles, &c., &c.

Persons ordering articles from the subscriber may depend upon having them made of the best materials and in the most workman-like manner.

**JOHN MOORE.**

New-York, Oct. 1, 1846—6t

### TO NEW-YORK FARMERS AND EMIGRANTS.

**ONE** hundred and fifteen thousand acres Illinois Lands for sale, in tracts of 40, 80, 120, 160 acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the state, and are situated in the counties most densely settled, viz., Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Mason, McLean, Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from \$3 to \$5 per acre.

A correspondent of one of the New-York papers, writes respecting this section of Illinois as follows:

"Beardstown, Cass Co., Ill., Jan. 10, 1846.

**THE RICHES OF THE WEST.**—GOTHAMITES ON THE WING.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of this western country, and I must say the beautiful prairies of Illinois, far exceed what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

"A New England man would hardly believe me if I tell him that some farmers here produce ten thousand bushels of corn, and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me that he raised the last year 6000 bushels of corn, and it was all produced by the labor of two men only.

"Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow."

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable, and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or the subscriber, will receive prompt attention. As many persons out of the state have an idea that the taxes are very burdensome in Illinois, we state that they range from \$1.50 to \$2.00 per annum, on 80 acres of land.

**JOHN GRIGG.**

Jan. 1, 1847.—6t

No. 9 North Fourth-st., Philadelphia.

### WILD TURKEYS.

**FOR** sale, two pair of wild turkeys—one pair of which were sent from Illinois in the fall of 1844, and the others were reared from them the present year. They are well domesticated, and are splendid birds. Price, \$10 per pair. Inquire at the OFFICE OF THE CULTIVATOR.

Dec. 1—2t.

### WIRE CLOTH SIEVE AND SCREEN MANUFACTORY.

**THE** subscriber has constantly on hand a large assortment of the above articles, which he offers at the lowest market prices.

July, 1846—10 mos.

**D. L. CLAWSON.**

191 Water-st., New-York.

P. S.—All kinds of wire work manufactured to order.

**GUANO.**—200 tons, the balance of the ship Shakspeare's cargo from Ichaboe, in tight casks, for sale in lots to suit purchasers, by

**E. K. COLLINS & Co.,** 56 South-st.

The many experiments made this season from this cargo, not only prove the great gain in using it, but that it is at least equal if not superior to any other guano.

Sept. 1, 1846.—t

### I. T. GRANT & CO.'S PATENT PREMIUM FAN MILLS.

**THE** subscribers, manufacturers of these celebrated mills, having enlarged their manufacturing establishment, hopes to be enabled hereafter to supply promptly the rapidly increasing demand for that article. These mills have been repeatedly tried, and the principle upon which they operate thoroughly examined and tested by committees appointed by the State Agricultural Society, and in every instance have been declared greatly superior to any that have come in competition with them. They have taken the first premium at four of the New-York State Agricultural Fairs, (being all at which they have been exhibited,) and at the State Fairs in Pennsylvania and Maryland. Our mills took the first premium, and we were awarded a silver medal for the new improvement, at the Fair of the American Institute in 1846, and they received the highest consideration at the great National Fair, recently held at the city of Washington. Wherever they have been exhibited, they have received the unqualified commendation of agriculturists, and are believed to be the only mills ever invented or manufactured, that will chaff and screen wheat perfectly clean (and at the rate of one bushel per minute) at one operation, taking out the chaff, cockle, and smut at the same time. They will also thoroughly clean all other kinds of grains and seeds by running it through once. We manufacture four sizes, varying in price from \$21 for No. 1, to \$27 for No. 4, and have no hesitation in warranting them superior to anything of the kind now in use.

We also manufacture very superior Grain Cradles, which have taken the first premium wherever exhibited.

Our Fan Mills and Cradles are for sale at factory prices at the following places:

John Mayher & Co., 195 Front-st., New-York.

E. Whitman, 55 Light-st., Baltimore;

Denslow & Webster, Savannah, Geo.;

Fitzhugh Coyle, Washington City;

Baggs & Parsons, Springfield, Mass.;

Pierce, Sweet & Co., Burlington, Vt.;

J. W. Howes, Montpelier, Vt.;

Luther Tucker, 10 and 12 Green-st., Albany, N. Y.

H. Warren, Troy;

J. S. & J. Brown, Newburgh.

Orders thankfully received and promptly attended to, and all goods delivered at Troy, N. Y., free of charge.

**I. T. GRANT & Co.**

Junction P. O., Rens. Co., N. Y., Jan. 1.—t

### NEW-ENGLAND AGRICULTURAL WAREHOUSE AND SEED STORE.

Nos. 51 and 52 North Market-Street, Boston.

**FOR** sale at this establishment, a general assortment of Agricultural and Garden Implements—Howard's Improved Patent Cast Iron Plows of all sizes. Martin's improved Eagle and other Plows; Double Mould Board, Side-Hill, Paring, and other plows, in great variety, and of the most approved patterns. Howard's Subsoil Plows, Cultivators of different descriptions; Willis' Seed Sower, (the best in use;) Geddes' and other Harrows of various patterns; Green's Straw-Cutters, Willis' Straw-Cutters, of various kinds and prices; Gault's Patent Churns, Grindstones or Friction Rollers; Cast Iron Field Rollers, (a very superior and substantial article;) Garden Rollers of cast-iron, different sizes; Iron Rakes of every size and variety; Garden Trowels, Syringes in great variety; Pruning and Budding Knives; Pruning Scissors, and Shears in great variety; Grass Hooks and Garden Shears; Garden and Field Hoes of every pattern; Scufflers every size; Pick Axes, Shovels, Spades, Dung and Garden Forks of every description; Hay Tools, including the very best Scythes manufactured in the country, (in all cases warranted;) Hall's and other Hay Rakes, Pitch-forks, Grain Cradles, Horse Rakes, Sickles, Austin's Rifles, Whet Stones, &c., &c.

Also a complete assortment of Chains, viz:—Fence Chains—Trace do.—Ox do.—Dog do.—Tie-up do. Hale's Horse Power; Hale's Threshing Machine and Winnowing Mills, Garden Engines, &c.

Also Axes, Hatchets, Bill Hooks, Hammers; Axe, Hoe, and Rake Handles; Ox Yokes, Bull Rings; together with every other article important for Agricultural or Horticultural purposes.

Harris' Paint Mill, the best in use, is also for sale at this establishment.

### SEEDS, TREES, AND PLANTS.

The subscribers are enabled to furnish seeds of the purest quality, of every variety of field, vegetable, and flower seed; embracing every variety desirable for cultivation.

Also, Fruit, Forest, and Ornamental Trees and Shrubs, of every description.

Orders promptly attended to. **JOSEPH BRECK & Co.,** Boston, Sept. 1—t.

## CORN AND COB MILLS.

**SINCLAIR'S** Patent Corn and Cob Crusher, for one horse, or more power—feeds one ear at a time. Price, with extra plates, \$30.

**Pitts' Patent** Corn and Cob Cutter. This is, probably, the easiest operating machine in use. The cutting is done by a series of knives or chisels; feeds one ear at a time. For description see January number *Cultivator*, 1847. Price \$40.

**Freeborn's Patent** Corn and Cob Crusher. This has a large hopper, and feeds itself—requires two or more horse-power—is an effectual machine. Price \$30; with extra plates, \$32. The above constantly on hand at the Albany Ag. Warehouse, Nos. 10 and 12 Green-st.

## FARMERS', GARDENERS', AND PLANTERS' STORE.

**A. G. MUNN, Louisville, Ky.**

500	BUSHELS clean Ky. Blue Grass;	
500	" " Orchard Grass;	
300	" " Red Top;	
200	" Red Clover;	All warranted
100	" Timothy;	
200	" Hempseed;	
200	" Barley;	crops of 1846
200	" Rye;	
100	" Heavy Seed Oats, 40 lbs. to the bushel.	

Also Lucerne, Millet, White Dutch Clover, Potatoes, Artichokes, Beans, Yams, Apple Seed, Peach Seed, &c., &c., together with a large stock of GARDEN SEEDS, by the pound, ounce, or paper, or put up in boxes to suit any market. A liberal discount made to dealers.

Also, a large stock of Agricultural Implements, such as Plows, Harrows, Cultivators, Churns, Corn-Shellers, Straw-Cutters, Fanning Mills, Hoes, Rakes, Spades, Shovels, Axes, Trace Chains, &c., &c., together with all the tools of the Horticulturist and Gardener.

Orders from abroad will meet with prompt attention.

N. B. Agen for nurseries, east and west.

Mr. MUNN will also act as Agent for "The Cultivator," and "The Horticulturist," and receive subscriptions and monies for both these works.

Feb. 1, 1847.—11.

## CORN SHELLERS.

**CONSTANTLY** for sale at the Albany Ag. Warehouse and Seed Store, No. 10 Green-street,

**Burrall's Hand Corn Sheller and Separator**, a new and very compact machine, one of the very best in use.—\$10.

**Clinton's Hand Corn Sheller**, the most rapid and formidable machine ever offered in this market; does not separate the cobs and corn. Price, \$10.

**Warring's Hand Corn Sheller**—shells very rapidly, but does not separate the corn and cob; a cheap and durable machine. Price, \$9.

**Smith's Corn Sheller and Separator**, for horse-power, capable of shelling ten to twelve hundred bushels per day.—\$50.

## TO PLANTERS.

**WANTED**, situations by two well experienced farmers as overseers, who will take charge of a part or the whole of Plantations. The best of references will be given.

Address **FRANCIS F. NILES,**  
Feb. 1, 1847.—11.\* Farmington, Ct.

## BURR STONE MILLS.

**THE** subscriber has received a supply of Fitzgerald's Portable Patent Cone Burr Stone Mills, for grinding wheat, corn, salt, coffee, spices, drugs, &c. This mill being made of the French Burr Stone, which on account of its hardness and sharpness of grit, is the best material for grinding, is also hung or moves on steel centres, and is very little affected by use; and when it does need sharpening it can easily be done, and in a few minutes, owing to its small size and form. This mill has taken the premium three years in succession at the Fairs of the American Institute, two years at the Franklin Institute, and all other exhibitions and fairs where it has been exhibited. The following from the many testimonials received in its favor, are sufficient to show the capacity and utility of the machine:—

"We the undersigned being present at an exhibition of Fitzgerald's Portable Burr Stone Mill, give the following as the results: Attached to the steam engine, it ground and bolted, with six horse power,

Wheat at the rate of one bushel in 5 minutes.	
Corn " " " 9½ "	
Black Pepper " " 6½ "	
Allspice " " 8 "	
Coffee " " 5 "	

We omit any recommendations of this recent invention, as being altogether unnecessary. The simple facts above stated, and an examination of the mill, will have more weight than anything we can add.

**EDWARD EARLE, M. D.,** 70 Christopher-st., N. Y.

**ARCHIBALD McVICAR, Jr.**

**ABRAHAM VAN EAT,** cor. Bleecker and Catharine-sts.

**JOSEPH VARICK,** 83 Amity-st.

New-York, April 22, 1846.

The above mills will be constantly on hand and for sale at the Albany Agricultural Warehouse and Seed Store, Nos. 10 and 12 Green-street, Albany, N. Y.

Feb. 1, 1847.

**LUTHER TUCKER.**

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## THE CULTIVATOR

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Of whom single numbers, or complete sets of the back volumes, can always be obtained.

Two editions of *The Cultivator* are issued—one without covers and unstitched, which, by the decision of the Postmaster General, is subject to newspaper postage only—the other, stitched in printed covers, the postage of which would be 3½ cents per number. The covered edition is never sent by mail, except particularly requested.

ADVERTISEMENTS inserted in the *Cultivator*, at the rate of \$1.00 per 100 words, for each insertion.

## HORSE POWERS AND THRESHERS.

**THE** attention of farmers is invited to Wheeler's Patent Horse Powers, an engraving and description of which is given in the *Cultivator* for Feb., 1847. Among the advantages of this power are its compact size and lightness, and the ease with which sufficient speed can be obtained for threshing, without gearing, and consequently greatly lessening the friction. It will be found a great labor-saving machine, as it may be attached to Threshing Machines, Circular Saws for sawing, Straw-Cutters, or any other machine which it is wished to impel by motive power. Price, for single horse power, \$75—for two horses \$95.

Also, Wheeler's Spike Thresher, with a cylinder of 14 inches in diameter, and 22 inches long, with the concave filled with spikes on the upper side, thus avoiding accidents by preventing stones or other substances getting into the Thresher. Another advantage of this Thresher is, that it scatters the grain much less than many others. Price, \$28—with Separator attached, \$35. The Separator divides the straw and grain, by a shaking motion which it receives from a crank attached to the Thresher, thus saving the work of one or two men with rakes.

With this Horse Power and Thresher, 200 bushels of oats, or 100 of wheat may be threshed per day, with a change of horses.

The above machines constantly on hand at the Albany Ag. Warehouse and Seed Store, No. 10, Green-street.

Albany, Jan. 12, 1846.

**LUTHER TUCKER.**